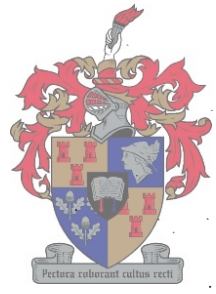
MANAGERIAL COMPETENCIES FOR WARRANT OFFICERS IN THE SOUTH-AFRICAN NAVY

J.J.H. Hanekom

8815828



Research assignment presented in partial fulfilment of the requirements for the degree in Master of Arts at the University of Stellenbosch.

November 1999

Study Leader: Ms. B van Wyk

DECLARATION

I, the undersigned, hereby declare that the work contained in this thesis is my own original work and that I have not previously in its entirety or in part submitted it at any other university for a degree.

OPSOMMING

Geselekteerde Eerste-bootsmanne ontvang gevorderde opleiding by die Skool vir Militêre Opleiding Deel 3, te SAS SALDANHA, in voorbereiding vir hul aanstelling as Adjudant Offisier in die Suid Afrikaanse Vloot. Die doel van die kursus is om leerders met die nodige kennis, vaardighede en bekwaamhede te voorsien sodat hul, hul Akte van Aanstelling kan verstaan en ook prakties toe te pas in staf of bestuurs posisies in die Suid Afrikaanse Vloot.

Die huidige kurrikulum vir bestuursopleiding kan beskou word as 'n model vir bestuursgedrag wat gebasseer is op aannames wat in 1988 omtrent die interne asook eksterne omgewing van die Suid Afrikaanse Vloot gemaak is. Hierdie omgewing het, sedert die kurrikulum aanvaar is, egter verander. Die verandering in omgewing, sonder 'n gepaartgaande verandering in bestuursopleiding uitsette, bring mee dat die volgende vraag gevra word: Gegewe die nuwe omstandighede, wat is die bestuurs bevoegdhede waaroor Adjudant Offisiere moet beskik? **Dit is dan die doel van hierdie navorsing om die verwagte bestuurs bevoegdhede waaroor Adjudant Offisiere in die Suid Afrikaanse Vloot moet beskik te bepaal.**

Die navorser maak gebruik van 'n verkennende en beskrywende navorsingsontwerp wat opgedeel is in drie fases. Die eerste fase is **Vooruitskatting** (Forecasting) wat die samestelling van 'n voorspelde bestuurstaak indeks (predicted managerial task inventory) behels. Hierdie indeks bestaan uit ses bestuurs funksies met twee en veertig gepaartgaande betuurs take. Die samestelling van die indeks is gegrond op hedendaagse bestuurs teorie asook vereistes in bestuur wat voorgeskryf is deur die Departement van Verdediging.

Die tweede fase, **Toetsing** (Testing), behels die evaluasie asook 'n re-evaluasie van die indeks met behulp van bydraes deur kundiges aangaande

die navorsings onderwerp (subject matter experts). Die groep kundiges moes elke taak vevat in die indeks evalueer aan hand van twee kriteria: die relatiewe belangrikheid van elke taak asook die frekwensie waarteen elke taak uitgevoer word. Die geleentheid was ook aan die kundiges gebied om, indien hul dit nodig sou vind, take by te voeg by die reeds bestaande indeks.

Die laaste fase in die navorsingsontwerp is die **Analisering** (Analysis) fase. Hierdie fase behels die analisering van die data wat opgelewer is in die vorige fase en om sodoende 'n finale taak indeks saam te stel. Hierdie finale indeks is heelaas gebruik om die bestuursbevoegdhede af te lei. Die data is gebruik om 'n kritieke waarde (critical factor) te bepaal vir elke taakstelling. Hierdie inligting, kritieke waardes, het die navorser in staat gestel om 'n indeks saam te stel wat betaan uit vier en twintig take wat relatief meer krities is ten opsigte van werk prestasie van Adjudant Offisiere.

Die finale indeks is gebruik om 'n bevoegdheid profiel saam te stel wat bestaan uit ses kern behoegdhede, stellings van omvang wat geassosieer word met die bevoegdhede, prestasie aanduiers asook stellings van kennis, vaardighede en bekwaamhede wat afgelei is van die kern bevoegdhede.

Die navorser sluit af deur te noem dat die kern bevoegdhede (kommunikasie, besluitneming, analities, prestasie bestuur en veranderings bestuur) eerder as kern funksionele areas beskou moet word waarin 'n Adjudant Offisier bevoegd moet wees.

Ander aanbevelings wat gemaak is, is dat soortgelyke bevoegdheid profiele vir die volgende hoër en laer range tot Adjudant Offisier die funksionele waarde van die bestaande profiel sal verhoog. Sulke informasie sal dit moontlik maak om meta-bevoegdhede vir Onder-Offisiere te bepaal. Die navorser beveel ook aan dat navorsing in generiese bevoegdheid profiele aangevul word met navorsing ten doele om verskille in verlangde bevoegdheid te bepaal tussen verskillende funksionele areas binne spesifieke pos vlakke.

SUMMARY

Selected Chief Petty Officers undergo advanced training in preparation for their appointment as Warrant Officer at the School for Military Training Part 3, at SAS SALDANHA. The aim of this course is to equip learners with the knowledge, skills and abilities to understand and apply the content of the Warrant of Appointment in staff and management positions in the South African Navy.

The current management training curriculum can be viewed as a model for managerial behaviour based on assumptions made in 1988 regarding the internal and external environment of the South African Navy. However, since the acceptance of the current management curriculum, the environment in which Warrant Officers act as managerial leaders has changed. The lack in complementary change in training output leads to the question: Which managerial competencies are required of Warrant Officers under the new circumstances? **The aim of this research is to determine the expected management competencies which Warrant Officers in the South African Navy must possess.**

An exploratory and descriptive research design is divided in three phases: the first, **Forecasting** entails the compilation of a predicted management task inventory. This inventory, consisting of six managerial functions with forty-two associated tasks, is compiled on the basis of contemporary models of management as well as the requirements for models of management set by the Department of Defence.

The second phase, **Testing**, is concerned with the evaluation and re-evaluation of the inventory against the input from subject matter experts. A sample group of subject matter experts had to evaluate the tasks statements on hand of two criteria: the relative importance of the task and also the

relative frequency in performing the task. The subject matter experts also had the opportunity to include any task they deemed necessary to the inventory.

The **Analysis** phase is the conclusive phase in the research design which entails the analysis of the data received from the previous phase and to compile a final task inventory from which the competency profile is generated. The data from the criteria evaluations were used to determine critical factors of each task by means of an integrated standard analysis. The information obtained from the analysis allowed for the compilation of a inventory of twenty-four tasks that are relatively more critical to the work performance of a Warrant Officer. This twenty-four element inventory was used to compile a competency profile that consists of six core competencies, range statements associated with the competencies, performance indicators as well as inferred knowledge, skills and ability linkages to the core competencies.

The researcher concluded with the recommendation that the core competencies (communication, decision making, facilitation, analytical, performance management and change management) should rather be considered as core functional areas in which a Warrant Officer should be competent.

Other recommendations are that related profiles, for next higher and lower ranks, will provide a greater functional context to the profile for Warrant Officers. Extended information provided by the related profiles would also make it possible to determine meta-competencies for Non-Commissioned Officers. Lastly, the researcher recommend that research in generic competency profiles should be complimented with research to determine variances in required competency between different musterings within specified post levels.

CONTENT

LIST OF TABLES

LIST OF FIGURES

LIST OF SELECTED ABBREVIATIONS

A	Ability
C	Consistency
DMTI	Draft Managerial Task Inventory
E	Error Score
ISA	Integrated Statement Analysis
K	Knowledge
KSA	Knowledge, Skills and Ability
MPAQ	Managerial Position Analysis Questionnaire
MTI	Managerial Task Inventory
MTR	Military Training for Ratings
S	Skills
SANDF	South African National Defence Force
SAS	South African Ship
SME	Subject Matter Experts
T	True Score

CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

Non-commissioned officers in the South African Navy attend three military courses during their career in the Navy. These courses are, in addition to functional courses, completed in qualification for promotion to a higher rank group. The first of the three military courses is Military Training for Ratings Part 1, which is generally known as basic training. The second is Military Training for Ratings Part 2, which is required for promotion from the rank of Leading Seaman to Petty Officer. The last in the series of courses is Military Training for Ratings Part 3, which is completed by Chief Petty Officers in preparation for appointment to the rank of Warrant Officer.

Selected Chief Petty Officers undergo advanced training in preparation for appointment to the rank of Warrant Officer at the School for Military Training Part 3, at SAS[2] SALDANHA. The aim of the course is to equip Chief Petty Officers with the knowledge, attitude and skills to understand the Warrant of Appointment; make it their own and apply it in staff and management positions in the South African National Defence Force (South African Navy, 1988 Curriculum for MTR 3 Training). The course curriculum consists of three main interrelated, learning areas. These areas are management and leadership, communication and divisional duties. Together with the main learning areas a compilation of other subjects is presented which is deemed necessary in order to achieve the aim of the course. Examples of such subjects are: Logistics, Finance, Intelligence, Military Law and Law of Armed Conflict.

---

[2]South African Ship

The current management-training curriculum can be viewed as a model for managerial behaviour based on assumptions made in 1988 regarding the internal and external environment of the South African Navy. However, since the acceptance of the present management curriculum, the environment in which Warrant Officers act as managerial leaders has changed. This change in environment requires changes in managerial values, viewpoints and ultimately different models of management. The lack in complementary change in training output leads to the question asked in this study: How valid is the current model for management training and therefore the content of the current curriculum in the changed environment? More specifically: Which managerial competencies are required of Warrant Officers under the new circumstances?

The reasons for change in the military environment are dominated by three inter-linked forces of change.

- The South African National Defence Force is currently undergoing a process of transformation to transform the armed forces in the context of the Constitution, National Security Policy, RDP, and International Law on Armed Conflict (Defence in Democracy, 1996). The transformation process includes the optimisation of force design and the enhancement of the efficiency of the Department of Defence through re-engineering of operating processes and procedures (Department of Defence, 1995:II).
- The implementation of Total Quality Management as ordered by the Chief of the Navy as management philosophy in a productivity improvement programme. (South African Naval Orders, 1995)
- The military budget is under severe pressure and has been reduced in excess of fifty percent, in real terms, since 1991. Notwithstanding these reductions, pressure remains on the South African Government to reallocate financial resources from military spending to socio-economic spending (Defence in Democracy, 1996).

The possibility of a gap between the learning output and requirements of the organisation, as hinted above, was confirmed by a training needs analysis

completed in 1997. (Short, 1997) The report based on the analysis indicates discrepancies between required and actual levels of performance in managerial functions, but does not indicate requirements of managerial behaviour in performing managerial tasks.

The researcher works as a management instructor at the School for Military Training Part 3 and is tasked to renew the present management curriculum, which has been in use since 1988, against the background of recent changes in the military environment in South Africa. For this purpose, with knowledge of existing discrepancies in management performance, the required managerial tasks of Warrant Officers must be analysed. Subsequently this also necessitates analysis in order to determine the management competencies necessary for Warrant Officers to perform effectively in their posts.

1.2 THE AIM OF THE RESEARCH

The aim of this research is to determine the management competencies which Warrant Officers in the South African Navy are expected to possess. The research is future-related because the new structures, processes and philosophy which originate from the continuous transformation process, will require different technologies in general management and human resource management (Department of Defence, 1995).

By researching expected management competencies for Warrant Officers in the South African Navy, it is hoped that information will become available to allow further research in compensation systems, staffing practices, performance management and human resource development - all of which can be integrated in the strategic management of the South African Navy (Schneider & Konz, 1994:169). More specifically, knowledge regarding predicted management competencies will allow educational staff in the South African Navy to assess

training needs; design suitable training programmes and determine whether such training will be viable in terms of resources available.

1.3 METHODOLOGY

In determining the management competencies for Warrant Officers in the South African Navy, an exploratory and descriptive research design is divided into three phases: the first of which is **forecasting**, which entails the compilation of a predicted management task inventory. During the second phase, **testing**, the inventory will be evaluated and re-evaluated against input from subject matter experts. The conclusive phase of the research design, **analysis**, will entail an analysis of the data acquired through the testing phase. The analysis is intended to result in an amended inventory of tasks which allows for the compilation of a general profile of predicted competency for managerial tasks.

The aim of the **forecasting** phase is to demarcate the scope of the research by developing a task inventory of predicted managerial tasks at Warrant Officer level. The researcher compiled a task inventory of the required future managerial tasks of Warrant Officers should be. This was done following a study of management literature; the current curriculum for management training at the School for Military Training; the South African Navy Needs Analysis for MTR 3 Training (Short, 1997), and policy documents pertaining to training and management doctrine within the South African National Defence Force. The policy documents which were referred to are: the White Paper on Defence (Defence in Democracy, 1996); the Management Doctrine for the Department of Defence, first draft (De Vries, 1997a) and Department of Defence, Education, Training and Professional Development in Transformation (De Vries, 1997b).

The second phase in the research was to **test** the compiled task inventory for content validity. The validity of the inventory is important since the predicted management competencies will ultimately be derived from the information gained

from the predicted tasks. Content validity implies that the inventory has accurately and fully identified the tasks which are important (Landy & Vasey, 1991:29). This was achieved by using the Delphi technique in which a panel of subject matter experts (henceforth SME) were requested to evaluate and re-evaluate the inventory. With each evaluation the SMEs had the opportunity to individually include various tasks they deemed necessary. Through a process of conceptual re-evaluation the content of the inventory achieved face validity (Schutte, 1998).

The last phase in the design was the **analysis** of the tested task inventory by which the results obtained in the testing phase were analysed to correct the original task inventory. The corrected inventory was used by the researcher to compile a general profile of predicted management competencies.

Table 1.1 indicates the aim, methods and techniques that are associated with each phase of the research design.

Table 1.1 THE AIM, METHODS AND TECHNIQUES WHICH ARE USED WITH EACH PHASE OF THE RESEARCH DESIGN.

RESEARCH DESIGN	AIM	TECHNIQUES
Forecasting	To develop a draft inventory of predicted managerial task	Literature study
Testing	To evaluate the comprehensiveness of the draft inventory.	SME
Analysis	To rank the tasks according to relevant importance. To make knowledge, skills and ability linkages with individual tasks. To compile a profile of competencies based on the knowledge, skills and ability linkages.	Statistical analysis and deduction.

1.4 LITERATURE REVIEW

The researcher has, for the purpose of the research, conducted a survey of the literature that included the following topics:

- General Management
- Performance Management
- Job Analysis
- Competency

Other literature perused includes, the current curriculum for management training at the School for Military Training, South African Navy Needs Analysis for MTR 3 Training (Short, 1997), and policy documents pertaining to training and management doctrine within the South African National Defence Force. Policy documents referred to are: the White Paper on Defence (Defence in Democracy, 1996); the Management Doctrine for the Department of Defence, first draft (De Vries, 1997a); the Department of Defence, Education, Training and Professional Development in Transformation (De Vries, 1997b).

1.5 LAYOUT OF RESEARCH REPORT

Chapter two provides the theoretical basis of the research. In the discussion, emphasis is placed on the concept of competency and how to measure it, as well as management functions, roles and tasks. A discussion of the requirements of the Department of Defence's models of management follows in **Chapter three.**

Chapters two and three culminate in **Chapter four** in which a draft managerial task inventory is compiled. The methodology of submission of the draft inventory is discussed in **Chapter five.** The discussion will include the development of the questionnaire, composition of the panel of SME, evaluation process, as well as the data obtained. Measures of validity and reliability are also indicated.

The results obtained from the evaluation process are analysed in **Chapter six**. This allows for the finalisation of the original inventory. Inferences regarding knowledge, skills and ability are made as well as a compilation of a general profile of predicted core management competencies for Warrant Officers in **Chapter seven**.

Chapter six consists of a summary of the research and recommendations based on the interpretation of results obtained.

CHAPTER 2:
THEORETICAL BACKGROUND

2.1 INTRODUCTION

This chapter provides a theoretical basis for the research by conceptualising the concept competency. Since research specifically concerned with management competency has challenges in measurement and operationalisation, a section of this chapter will be devoted to explaining the concept of management competency. It will become clear in the discussion that the concept of management competency has to be described and measured within a contextual framework.

A theoretical framework will be created in this chapter with reference to different models of management as developed throughout the years. This theoretical framework will be used in complement with requirements of the Department of Defence in models for management, which are discussed in chapter 3, to develop a management task inventory for Warrant Officers in the South African Navy.

2.2 THE MEANING OF COMPETENCY

The term competence is widely used in society to express adequacy. This is illustrated by the definition provided for in the Oxford Advanced Learner's Dictionary (Cowie (ed), 1989:235): "...having the necessary ability, authority, skill, knowledge...". The Oxford Dictionary for the Business World (Thompson (ed), 1993: 164) defines competency as: "adequately qualified or capable".

The definitions indicate a focus on adequate qualification or capability, with capability defined as specific knowledge and skills to perform tasks. Such a focus

on qualification and subsequent capability is of importance to human resource managers since it determines the application of human resources in positions of authority[2]. For this, reliable and valid indicators of adequacy in applications are necessary for effective and efficient functioning of organisations.

2.2.1 Competency defined

Competency, viewed as the ability to perform a task, can be defined as the integration of knowledge, skills and ability that will lead to behaviour which is required to meet a desired level of performance in completing a task. Knowledge (K) refers to a body of knowledge, factual or procedural, which, if it is applied, would enable an individual to achieve a level of performance. Such knowledge forms the basis for skills and ability, where skill (S) refers to the ability to complete job operations with ease and precision while ability (A) implies the cognitive ability necessary to perform a job. It usually requires the application of knowledge. By specifying skills, a standard of performance is set which must be adhered to (Goldstein, 1993:62 and Meyer, 1993:34).

The above description of competency integrates two different approaches to the concept; namely the attribute and the performance approaches. Both these approaches can be indicated on a continuum with each of them representing extremities in approach.

Descriptions of competence, based on a purely **attributive approach**, deduct, underlying characteristics from behaviour. Competency is viewed as a personal trait, behaviour, motive, skill, or aspect of ones self-image which results in effective performance in order to complete a task. The **performance approach**, in comparison, defines competency in terms of pre-set performance standards. According to the performance approach, competency encompasses behaviour, which is considered valuable by the employer, which is related to job content

[2] Refers to a delegated position in which a task or group of tasks has to be performed.

through application of knowledge and skills. (Ernst cited in De Vries, 1997b:126 and Meyer, 1993:33-36).

By combining the two approaches it is possible to define competency as the integration of the skills and knowledge necessary for behaviour in accordance with defined standards related to the content of a specific job. It would also indicate the necessary personal requirements associated with the context, in which the job has to be completed. Such a combination in approach is illustrated by Critten (1993:18-19):

"Competence is a wide concept which embodies the ability to transfer skills and knowledge to new situations within the occupational area... It includes those qualities of personal effectiveness that are required in the workplace to deal with co-workers, managers and customers."

2.2.2 Conceptual Structure of Competency

Competency, as indicated in the above section, does not exist in a vacuum. Critten (1993:18) emphasises such a contextual dependency by referring to competency as the ability to perform activities in an occupation or function to attain standards expected by the employee. The deduction can be made, from the above definition of competency and the definitions provided in the previous section, that competency is contextually bound to prescribed standards of performance in performing a job.

Prescriptions for performance standards originate from two related but different organisational dimensions: organisational core competence and organisational strategic competence, which are respectively associated with the organisational vision and secondly, the strategy for the achievement of the mission of the organisation. These core and strategic organisational competencies indicate practices, which make the organisation as a whole, a productive entity, and also

creates a contextual framework for individual competencies (Hall, 1988:522 and Meyer, 1996:60).

In the preceding two paragraphs three different conceptual levels of competence were mentioned. They are organisational core and strategic competence as well as individual competence. All these competencies form part of a conceptual structure of competency which are developed in order to conceptualise different categories of competency; the linkages between them, as well as contextual driving forces of each. The identified categories are national, organisational, individual and occupational competencies. Table 2.1 indicates the different categories of competency.

Table 2.1 DIFFERENT CATEGORIES OF COMPETENCY

CATEGORY	SUBCATEGORY	DRIVEN BY
National	Core competence capabilities	National economic and development strategy
Organisational	Core competence strategic capability	Organisational strategy
	Corporate strategic competency	
Occupational	Managerial	
Individual	Vocational	Individual career management
Individual	Meta-competencies	Personal motivation and abilities

National core competence refers to the clusters of competence which have developed around strategic industries in a country and would be underwritten in the national economic and development policy of a country (Meyer, 1996,50).

Organisational core competency refers to the combination of individual technologies and production skills, which identify an organisation's myriad of

product lines (Prahalad and Hamel cited by Meyer, 1996:59). It assists top managers to answer the fundamental question "What should we do?" or differently stated to decide on a organisational strategy, by clearly defining organisational boundaries and focus resources for maximum advantage (Snyder and others, 1997:123). It is argued, by Meyer (1996:59), that corporate core competency is the aggregate of the occupational, technical and generic individual competencies of all the employees in the organisation providing it with a competitive advantage.

Deciding on organisational core competency, vision and mission is the norm in private organisations which have, at corporate level, the freedom to position and reposition their organisations in more competitive market and technological environments. However, "what has to be done", or the core corporate competency to be pursued in public sector organisations, is usually prescribed by a mandate from Parliament. Determining the core competency of public organisations is not a process by which directors determine a competitive advantage to focus on, but rather the execution of a prescription or mandate by Parliament on what is required to be done. Such a mandate would normally include what must be done, what could be done, and what must not be done. (Smith, 1994:29-30, 41)

The core function / competency for the South African National Defence Force is prescribed in the mandate for Force Application in the South African Constitution. The core function is to defend South Africa against external military aggression (Defence in Democracy, 1996:26).

Corporate strategic competency refers to supporting systems, technologies, processes and abilities necessary for the achievement of the mission and the maintenance of the organisation's core competence. While core competence distinguishes one organisation from another, different organisations may possess similar strategic competencies. Strategic competence manifests in occupational, vocational and managerial competencies of individuals and in doing so, links the organisational strategy with individual competency identification and human resource development (Meyer, 1996:60-61).

Occupational competencies are defined as the competencies which an individual requires to be successful in the occupation[3] he/she is pursuing. It can be measured in terms of knowledge, skills and ability, which are directly associated with the individual practising the occupation. The practising of such competency should however meet the requirements, as determined by the employee, associated with the vocational field to be of value to the organisation. This category of competency can be divided in either vocational or managerial competency.

Individual vocational competency refers to subject matter directly related to a vocation, such as engineering, in which a individual has to perform specific functions and technical roles to meet a required level of job performance.

Individual meta-competency refers to the individual competency required to function in a modern economy and is not directly linked to either a specific occupation or profession (Meyer, 1996,65). Such competencies are mainly attribute based and do not manifest independently.

2.3 MANAGERIAL COMPETENCY

Management is an occupation in which specialised managerial functions and jobs are performed in combination with technical or professional vocational functions (Meyer, 1996: 99). It is difficult, unlike with technical occupational sectors, to provide an inventory of behaviour (or managerial tasks) which, if performed, should lead to a required level of job performance. Vocational competency refers

---

[3] An occupation, just as a vocation, can be considered as a collection of jobs. A very important distinction between occupation and vocation is however that jobs associated with a occupation is transferable to various vocations, whereas jobs associated with a vocation are limited to a specific context with a required level of performance.

to subject matter directly related to a vocation. Engineering, as a vocation, can serve as an example: An engineer has to perform specific and universal technical functions and roles to attain a specified level of job performance. Management can be viewed as a vocation, however, the principles of management can be applied through different sectors of occupation. It is therefore difficult to compile an inventory of behaviour that should lead to job performance, unlike with technical occupational sectors. This difficulty is caused mainly by the lack of agreement on universal managerial roles and functions.

The difficulty to provide such a uniform inventory is, according to Meyer (1993:64), due to contextual boundaries of managerial work. For example: Differences in organisational characteristics have various influences on the role and functioning of management. Furthermore, many functions performed by management are similar to generic meta-competencies in organisation.

Another distinctive characteristic of management as an occupation, is that effective managers need to have knowledge of professions which are not related to their individual vocation, itself (Meyer, 1996: 99). Depending on the context of the managerial work, knowledge of for example, finance, logistics, law, marketing, public relations and / or human resource management will be necessary.

The above highlights difficulties in defining management competency. The contributing factors can be summarised as:

- The lack of universal agreement by theorists and practitioners on the function and role of management in varying contexts.
- The interrelationship between generic meta-competencies and those of management as an occupation.
- The knowledge and skills, required to be a competent manager, are not limited to a specific profession or vocation.

It is however, notwithstanding the above mentioned difficulties, possible to define management competency as integration of the underlying KSAs that will allow an

individual to illustrate behaviour which are consistent with occupational management functions as well as vocational functions that a specific occupational context may require.

2.4 THE RELATIONSHIP BETWEEN COMPETENCY AND JOB PERFORMANCE

Meyer (1996:37) emphasises that there is no direct correlation between the presence of individual competence and individual job performance. If an individual is competent to perform a job according to a required level of performance, it will not necessarily lead to the attainment of the required level performance. Meyer continuous to argue that "competency is a necessary, but not sufficient, condition for performance."

From the above, it can be deduced that effective and efficient performance depends on more than the inherent competence of an employee. Various authors have, in the attempt to indicate influences other than competence to performance, adopted a systems approach to the organisation with individual behaviour consistent with the required level of performance as the output of the system.

Van Dyk (in Gerber, Nel and Van Dyk, 1997:13) provides a contextual framework which illustrates how an individual functions within a larger organisational system. Important components of such a system are (Hall and Doodale cited by Van Dyk in Gerber, Nel and Van Dyk, 1997:13) as follows:

- The **external environment** that includes economic, social, political and technological factors.
- The **organisation** that includes factors such as size, structure, technology, human resource policy and culture.
- The **work itself** that consists of elements such as the degree of variety, autonomy and challenges that an employee has.

- The **employee** who has his/her own abilities, knowledge, personality and values.

Muchinsky, Kriek and Schreuder (1998:277) argue that an organisation is a complex and dynamic system and that individual behaviour cannot be understood unless the social system in which it occurs is understood. The social system includes roles, norms, power and culture.

Another view is provided by Harvey and Brown (1996:38-40) who consider an organisation as a sociotechnical system with different inter-related subsystems. Harvey and Brown (1996:39) identified various subsystems such as:
The structural subsystem, which includes the formal design, policies and procedures.
The psychosocial subsystem, which includes the network of social relationships and behaviour patterns of members, such as norms, roles and communications.
The technical subsystem, which includes the primary functions, activities and operations used to produce the output of the system.
The goals and values subsystem includes the mission and vision of the organisation.
The managerial subsystem stretches over the whole organisation by directing, organising and co-ordinating activities towards the mission of the organisation.

The conceptual frameworks of Van Dyk (in Gerber, Nel and Van Dyk, 1997:13), Harvey and Brown (1996:38-40) and Muchinsky, Kriek and Schreuder (1998: 277) support the statement made by Meyer (1996:37) who emphasised that there is no direct correlation between the presence of individual competence and individual work performance. Each of the conceptual frameworks, Van Dyk (in Gerber, Nel and Van Dyk, 1997:13), Harvey and Brown (1996:38-40) and Muchinsky, Kriek and Schreuder (1998: 277), makes provision for individual competency, but illustrates that skills, ability or knowledge alone are not sufficient for required job performance.

If one focuses on management performance by referring to management development, which is directed to improve productivity, performance and the achievement of objectives (Erasmus and Van Dyk, 1999:211); one will find that similar contextual influences are present as indicated in the conceptual frameworks of Van Dyk (in Gerber, Nel and Van Dyk, 1997:13), Harvey and Brown (1996:38-40) and Muchinsky, Kriek and Schreuder (1998: 277). Erasmus and Van Dyk (1999:211) highlights such a similarity by stating that development of management competency should not be viewed in isolation, but a whole range of related and interdependent activities should be performed in parallel. They conclude by saying that the development of management competency will not be effective unless it is carried out as a complete process that addresses all relevant issues where the parts work together. Some of these relevant issues mentioned by Erasmus and Van Dyk (1999:211) are:

- Future management profiles
- Culture change actions
- Remuneration systems
- Training
- Career development reviews
- Judgements of potential
- Appraisal and counselling

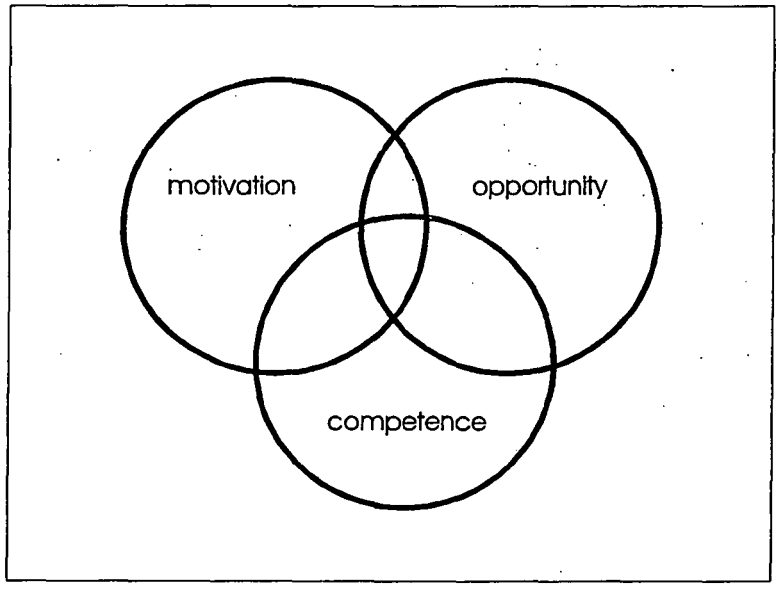
From the argument of Erasmus and Van Dyk (1999:211), it can be deducted that the development of competency through, for example training, should be seen as a independent subsystem of the organisation. Goldstein (1993:17) agrees that it is unrealistic to view a training system as subsystem that performs in a vacuum in relation to the larger organisation. Goldstein (1993:17) goes further to explain that many investigators have been disappointed with the results of their training programmes because they assumed that success would always follow the implementation of a well-conceived programme. In conclusion Goldstein (1993:17) continues by stating that in instances supervisors did not permit the employee to use the skills that were acquired in the training programme.

Meyer (1996:37) proposes a working environment that consists of interrelated influences to job performance. These interrelated influences are:

- The competence of the employee
- The motivation of the employee
- The work environment itself that will allow or disallow an employee to behave in a competent way to reach the required level of performance.

The interrelationship between the factors identified by Meyer (1996:37) is indicated in figure 2.1.

Figure 2.1 THE RELATIONSHIP BETWEEN JOB PERFORMANCE AND THE COMBINATION OF COMPETENCY, MOTIVATION AND OPPORTUNITY.



(Meyer, 1996: 37)

The area of cross section between motivation, opportunity and competence, in figure 2.1, theoretically indicates an enabling environment in which the opportunity, motivation for and competence to perform are present. Meyer (1996:37) argues that these three elements, not just competency alone, need to be present in order to have good job performance.

Table 2.2 indicates the similarity in the frameworks of Meyer, and Muchinsky, Kriek and Schreuder, and Erasmus and Van Dyk.

Table 2.2 RELATIONSHIP BETWEEN THE CONCEPTUAL FRAMEWORKS OF MEYER, AND HARVEY AND BROWN, AND MUCHINSKY, KRIEK AND SCHREUDER, AND ERASMUS AND VAN DYK.

Meyer (1996:37)	*Harvey and Brown (1996:38-40)*	*Muchinsky, Kriek and Schreuder (1998:227)*	*Van Dyk (in Gerber, Nel and Van Dyk, 1997:13)*
Motivation	Managerial sub-system Goals and values sub-system Psychosocial sub-system	Norms Power Culture	Work itself External environment
Competence	Technical sub-system		Employee
Opportunity	Managerial sub-system Psychosocial sub-system Structural sub-system	Roles Norms Power Culture	Organisation

The columns in the above table provide information of each contextual framework while the rows indicate the relation between the various frameworks and subsystems with the framework of Meyer.

2.5 MODELS OF MANAGEMENT

This section provides theoretical background in the development of different models of management. Such background will enable the researcher to develop a integrated model of management that will ultimately be used as conceptual framework for the compilation of a management task inventory.

2.5.1 The Development of Different Models of Management

Models of management should not be viewed as products of either theorists, effective managers, nor political forces alone, but rather as a synthesis from interrelated influences in society as a whole. A holistic approach interprets models of management as a synthesis of contributions from research theorists, effective managers and influencing political forces and serves as a reflection of the values and viewpoints of a society over a given period (Quinn and others, 1996:3).

The first models for management were documented at the turn of the nineteenth century and are associated a Classical perspective to management (Bounds and others, 1995:47). Various models of management of which each can be associated with different perspectives to management have since been developed in an attempt to improve models by aligning them with the changing societal values.

The different perspectives to management are (Quin and others, 1996 as well as Griffen, 1996):

- The Classical management perspective with associated scientific and administrative models of management.
- The Behavioural management perspective with associated human relations and behavioural science models of management.
- The Quantitative management perspective with associated management scientific and operations models of management.
- The Open Systems management perspective.
- The Contingency management perspective.

The Classical Management Perspective

The classical perspective to management is characterised by two different but related models of management. Frederick Taylor, Frank Gilbreth, Lillian Gilbreth,

Henry Gantt, and Harrington Emerson contributed towards the scientific management model, which Taylor played the dominant role (Griffen, 1996:38). The scientific management model has the premise that clear direction would lead to productive outcomes, routines would lead to stability and that organisational effectiveness is measured purely by productivity and profit (Quin and others, 1996: 4). With this premise, the emphasis in management behaviour was goal clarification, rational analysis, and action taking (Quin and others, 1996: 4).

In an attempt to maximise the productive outcome of employees, Taylor developed guidelines for the managerial function by which the managers have to (Stoner and others, 1995, 34):

- Develop a true science of management in order that the best method in performing tasks could be determined.
- Scientifically select workers, so that every worker can be given the responsibility for the work he/she is suited for.
- Scientifically educate and develop the worker.
- Encourage intimate and friendly co-operation between labour and management.

This model, and specifically the work of Taylor, focuses mainly on the content of an employee's work and on methods to improve individual performance of employees (Wren, 1979:126). Such improvements would lead to higher performance, productivity and profit, with the role of the manager equal to that of director and task-orientated producer (Quin and others, 1996: 4).

The limitation of the scientific management model is its focus mainly on increasing productivity by means of directing work content. Higher productivity was achieved, in general, by decreasing the time of production. This subsequently led to the fear among both employees and unions that the increased work rate would exhaust the available work and would thus result in future retrenchments. The focus on decreased production time in order to improve productivity, also led to an

increasingly strained work environment in which managers exploited employees. This exploitation and the fear of retrenchment contributed to a rapid increase in membership of trade unions (Stoner and others, 1995:34).

The administrative management model, also within the scope of the classical perspective, focuses on the management of the total organisation. The premise of this management model is that management's primary function is to clarify goals and objectives, rational analysis, control and the regulation of work processes to attain a desired level of organisational effectiveness - effectiveness measured in productivity and profit. Contributors to this model were Henri Fayol, Lyndall Urwick, Max Weber, and Chester Barnard, with Fayol and Weber as the main contributors. Fayol systemised managerial behaviour in the organisation as a whole. He identified fourteen principles of management, which, according to him have to be applied to ensure a productive organisation (Stoner and others, 1995:35). He documented five categories of managerial functions: planning, organising, directing and controlling, according to the following specified principles (Bounds and others, 1995: 50 and Fayol, 1990:181-202).

- Division of labour
- Authority and responsibility
- Discipline
- Unity of command
- Unity of direction
- Subordination of individual interest to general interest
- Remuneration of personnel
- Centralisation
- Scalar chain
- Order
- Equity
- Stability of tenure of personnel
- Initiative
- *Esprit de corps*

Weber contributed by developing the theory of bureaucratic management by which employees' contributions were controlled and regulated by a hierarchy of defined regulations and clear lines of authority. This hierarchy was termed a bureaucracy and characterised with rationally considered objectives carried out *via* division and specialisation of labour in order to achieve objectives in the most effective and efficient way possible (Stoner and others, 1995:37).

Increases in social welfare of First World societies, during the period 1926 to 1950, made the organisational environment more complex than before. This ultimately led to a decline in popularity of the classical perspective to management amongst professional managers and theorists. A higher economic growth rate, together with accompanied higher wages, led to an overall increase in social welfare. The increase was of such an extent that human existence surpassed working for survival. People could afford consumer products, whilst industry responded favourably to the greater and more complex demands. Values and viewpoints also changed; authority was questioned, and overtime work was not equal to economic survival anymore (Quin and others, 1996:5).

The changes in society highlighted deficiencies in both the scientific and administrative models of management. The inherent deficiencies are (Bounds and others, 1995:51, Griffen, 1996:41-43, and Stoner, 1995:34-41):

- Both management models were rigid and formalised in prescribing the role of management as universal functions.
- In the attempt to maximise productivity, it failed to attend to the human aspect of the organisation.
- The prescription of division of labour in specialised functions, which are still practised, led to the inability to sufficiently change in order to meet new challenges in the organisational environment.
- Division of labour in specialised functions also created an organisational environment wherein the attainment of internal goals, at times, substituted the

ultimate goal of the organisation, which is the delivery of products and services to clients.

The classical perspective to management was challenged by the behavioural perspective (Griffen, 1996:43) with the human relations and behavioural science models substantive models of management.

The Behavioural Management Perspective

The studies, conducted by Elton Mayo and Fritz Roethlisberger at Western Electric's Hawthorne plant between 1927 and 1932, made a fundamental contribution to the behavioural perspective to management (Griffen, 1996: 44). The studies resulted in the conclusion that employee attitude has an important influence on productivity (Stoner and others, 1996: 42). Griffen (1996: 45) explains that from the above-mentioned conclusion a further assumption was made that inter- and intra-personal processes played a fundamental role in shaping employee attitude and behaviour.

The Hawthorne studies laid the foundation for the human relations model of management. This model proposed that employees respond primarily to the social context of their work environment, which include social conditioning, group norms and interpersonal dynamics (Griffen, 1996: 45). The basic assumption was that employee involvement through continuous participation, conflict resolution and consensus building would lead to cohesion, high morale, work satisfaction and eventually commitment to organisational goals and higher performance. The main function of a manager in such an environment, would be that of an emphatic mentor and of a process orientated facilitator using techniques to increase involvement, participation in decision making and motivation through participation (Quin and others, 1996: 7). These functions of mentor and of facilitator are outcomes of typical management occupational competencies, which can be practised, in different vocations.

Contemporary theorists, however, note that assumptions made by the human relation theorists were simplistic and inadequate descriptors of work behaviour. For example: The assumption that worker satisfaction will lead to higher performance, has been shown to have little validity. Critics argue that more validity exists in the argument that satisfaction follows good performance rather than preceding it (Griffen, 1996:46). Bounds and others, (1995:55) indicate that further criticism is directed at the human relation theorists due to the fact that the social environment is only one of many factors that affects employee motivation and productivity and should thus not be isolated.

The human relations model, despite the criticism, contributed in the awareness it provided to motivation, group dynamics and interpersonal processes in organisations. The greatest limitation of the human relations model, however, was the complexity of human behaviour and the difficulty in predicting such behaviour. Another limitation was the fact that this model ran counter to the assumptions of the earlier and widely used classical perspective, and therefore created reluctance in managers to accept and implement this model of management (Quin and others, 1996:7 and Griffen, 1996:47).

The behavioural science model attempted to overcome the deficiencies of the human relations model. Researchers, trained in social sciences, used more sophisticated research methods than researchers working within the paradigm of the human relations model, to develop theories in human behaviour. The premise that humans have inherent potential for performance was maintained, along with the argument that managers should be able to understand causes of human behaviour in order to make full use of their subordinates potential (Stoner and others, 1995: 43, and Bounds and others, 1995:55). Such an attempt to understand human behaviour, requires knowledge from an interdisciplinary base together with a holistic view of human behaviour. This alone, would enable managers to address individual, group, and organisational processes such as job satisfaction, stress, motivation, leadership, group dynamics and interpersonal conflict.

The Quantitative Management Perspective

The Second World War gave birth to a new management perspective: the quantitative perspective. The war effort posed the challenge of deploying resources more effectively and efficiently. This challenge led to the application of mathematical approaches to management. Griffen (1996:46) as well as Bounds and others, (1995:56) state that this approach manifested in two models for management after the war: management science and operations management, which focussed on quantitative techniques in decision-making.

Management science focuses on the development of mathematical models to assist managerial understanding of complex situations and subsequent decision-making regarding such situations. The mathematical models would simulate scenarios, using precise information on ranges of variables related to problem situations. Operations management is, in comparison with management science, less mathematical and can be viewed as applied management science vital to managerial problem situations such as inventory control, transport, and other aspects in the organisation that are conducive to quantitative analysis. (Bounds and others, 1995:56, and Griffen, 1996:48)

Griffen (1996:49) indicated problems associated with the quantitative perspective as the inability to fully explain or predict human behaviour and, he argues that the mathematical models used by operations management are, at times, dependent on unrealistic or unfounded assumptions. Furthermore, the expertise, to match the mathematical sophistication of calculations associated with the quantitative perspective may be made available at the expense of other important skills.

The Open Systems Management Perspective

The time period of 1951-1975 saw the emergence of the open systems perspective to management in a period associated with a world economic shock caused by the energy crises; the emergence of the Japanese as competent competitors for the dominant American economy, and also a Western market shift

from the traditional product towards a service economy. These changes in the world economy made the need to understand how to manage organisations in rapidly changing and competitive environments apparent (Quin and others, 1996:8).

The systems perspective to management views the organisation as a unified and purposeful system consisting of interrelated parts (Stoner and others, 1995:46). Managers, adopting such an approach, view the organisation as part of a larger environment that would enable them to be responsive to a rapidly changing environment (Stoner and others, 1995:46 and Quin and others, 1996:9).

The criteria for organisational effectiveness are, according to Quin (and others, 1996:9) effectiveness and external support. Thus, through continual adaptation and innovation, management would be able to acquire and maintain the input of necessary resources for production. Such an organisation is characterised by a process of creative problem solving, innovation, management of change, and shared vision and value systems.

The Contingency Management Perspective

The contingency perspective to management, unlike preceding classical, behavioural and quantitative perspectives which prescribe universal models for management, suggests, as the open systems perspective suggests, that there is no universal model for management to be applied in all situations (Griffen, 1996:51). The contingency perspective integrates the different perspectives in a dynamic model, in which the role of the manager is not restricted to only systematic processes of decision making, planning or controlling in a stable organisational environment (Griffen, 1996:49, Quin and others, 1996:9). The manager's main function is rather to attend to the linked relationships and interdependent processes of transformation that provide outputs or products to clients. The focus of the manager in performing the above function moves away from the structure and hierarchy that are perceived to be necessary for organisational effectiveness in earlier models of management (Bounds and others,

1995:61). The focus or criteria for organisational effectiveness moves towards the adaptability of the organisation and the maintenance of external support for resources.

An organisation is, according to the contingency approach, a system that is in a continuous and dynamic relation with its environment. Management behaviour in such an organisation would depend on, or be contingent on, the unique elements of each situation as it arises (Jones cited in Griffen, 1996:51). Osteraker (1999:104) continuous to argue that such elements are unique to situations, in presence or intensity, and include contextual factors such as the nature of the work, or situation, the nature of the environment external to the situation / work and the characteristics of the employees involved.

The contingency approach is a holistic approach to management by which the manager needs to identify variables underlying any situation, understands the relationship between the variables and also recognises the cause and effect relationships between the variables (Griffen, 1996:52). A manager that follows such an approach is essentially adopting a systems approach in analysing unique situations upon which he / she needs to integrate traditional management theory with the variables that were identified (Wren, 1979:465).

Stated differently, the contingency approach views the organisation as an open system, with efficiency and effectiveness as goal, that needs to adapt to the influences that originate from the environment while the appropriateness of managerial behaviour depends on the uniqueness of each given situation. Effective management behaviour in one situation cannot be universally prescribed for other or similar situations. The manager's behaviour would depend on his or her ability to analyse a situation and to integrate managerial competencies, which are associated with the spectrum of approaches and models for management, with the variables of the situation in acting the managerial role. This approach can be interpreted as mostly a methodological influence since it suggests a "It depends..." approach with aspects of all the prior models of management as guidelines for

managerial behaviour. (Griffen, 1996:51-53, Stoner and others, 1995:48-49, Quin and others, 1996:9-12, and Wren 1979:464)

The main contributions made by each model are indicated in Table 2.3.

Table 2.3 THE MAIN CONTRIBUTIONS MADE BY THE DIFFERENT MANAGEMENT PERSPECTIVES.

	THE CLASSICAL MANAGEMENT PERSPECTIVE
General Summary	The classical perspective has two main models for management. The scientific management model which focuses on individual employees within an organisation to improve his/her productivity by means of clear direction for effort. Administrative management model focuses on the total organisation and universal and systemised functions of management that have to be performed to improve organisational efficiency and effectiveness.
Contributions	This perspective laid down a foundation for development of management theory in identifying management functions, processes and skills that need to be performed.
Limitations	This perspective is most appropriate to stable and simple organisations. It prescribes universal functions and processes which are supposedly applicable to all environments. Employees were generally viewed as extensions of machines and not resources.
Criteria of effectiveness	Productivity, profit, stability and continuity.
Premise	Clear direction leads to productive outcomes while routinism leads to stability.
Role of manager	Director and producer, as well as monitor and co-ordinator.
	THE BEHAVIOURAL MANAGEMENT PERSPECTIVE
General Summary	The behavioural perspective focuses on employee behaviour in the organisational environment. A contemporary development from this perspective is organisational behaviour that draws from an interdisciplinary base and recognises the complexity of human behaviour.
Contributions	This perspective provided valuable contributions to the theory of motivation, group dynamics, and interpersonal processes in organisations. It started a movement towards the view that employees are valuable resources and not just extensions of machines.
Limitations	The complexity of human behaviour makes prediction thereof difficult. Managers are reluctant to adopt behavioural concepts. Research findings are often not communicated to managers in an understandable form.
Criteria of effectiveness	Commitment, cohesion and morale.
Premise	Involvement leads to commitment.
Role of manager	Mentor and facilitator.

Table 2.3 (Continued) THE MAIN CONTRIBUTIONS MADE BY THE DIFFERENT MANAGEMENT PERSPECTIVES.

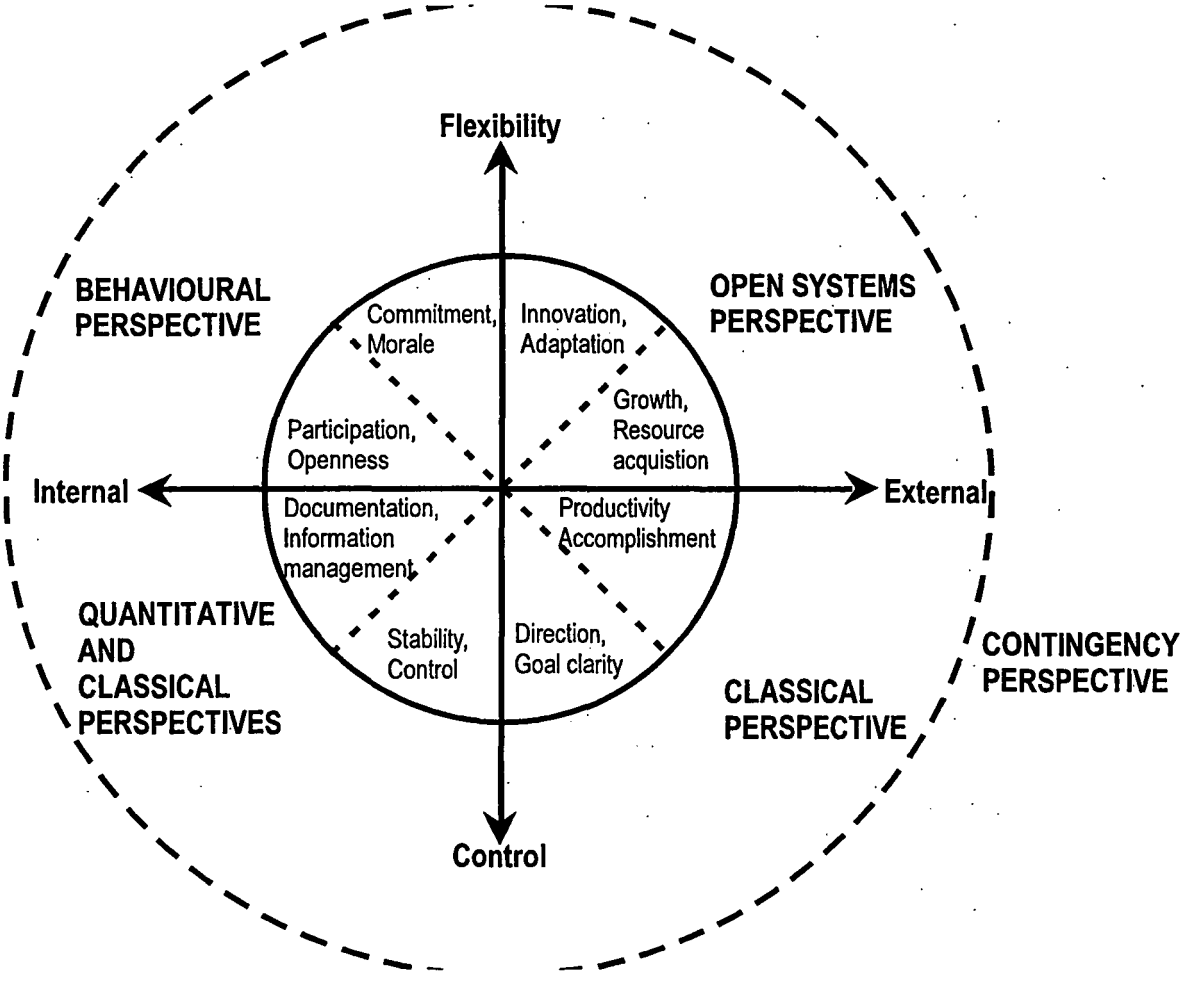
	THE QUANTITATIVE MANAGEMENT PERSPECTIVE
General Summary	The Quantitative perspective focuses on applying mathematical models and processes to management situations. Management science deals with the development of models to aid decision making, while operations management focuses on the application of management science.
Contributions	Scientist from this perspective developed sophisticated quantitative techniques to assist decision making. It increased the awareness of the complexity of organisational processes. The techniques associated with this perspective are specially useful in planning and controlling processes.
Limitations	It cannot fully explain human behaviour. It requires mathematical sophistication at the expense of other important skills. It requires, at times, unrealistic or unfounded assumptions.
Role of manager	Monitor and director
	THE OPEN SYSTEMS MANAGEMENT PERSPECTIVE
General Summary	The open systems approach introduces views to which the organisation, as part of a larger dynamic environment, has to respond continuously.
Contributions	It developed the understanding that the activity of any segment of the organisation affects the activity of all other segments. It fosters a holistic approach to management.
Criteria of effectiveness	Adaptability and external support.
Premise	Continual adaptation and innovation lead to acquiring and maintaining external resources.
Role of manager	Innovator and broker.
	THE CONTINGENCY MANAGEMENT PERSPECTIVE
General Summary	The contingency perspective suggests that there is no universal model for management that can be applied in all situations. It integrates the different perspectives in a dynamic model.
Contributions	It developed the understanding of a holistic approach to management that requires from management the ability to identify variables underlying to situations, understands relationships between variables and the cause and effect relations between the variables. The manager should also have the ability to integrate the traditional perspectives to problems in a "It depends..." approach.
Criteria of effectiveness	Adaptability and external support.
Role of manager	Facilitates organisational adaptiveness and support for external resources.

2.5.2 An Integrated Model of Management: The Competing Values Framework

Quin and others (1996:11-21) developed a single competing values framework, by which different perspectives, with associated models of management, are combined as sub-domains to a holistic view of organisational effectiveness. Quin and others (1996:11) argue that no model can singularly allow for the range of perspectives, choice and potential effectiveness when considering them all as part of a larger framework. This framework indicates the relationship amongst the different models for management on two axes. The vertical axis, figure 2.2, indicates a continuum with orientation to flexibility and control as different poles. The horizontal axis, on the other hand, indicates a continuum with poles representing an internal organisational focus on the left and an external organisational focus on the right. Each model of management, as previously discussed, fits in one of the four quadrants. Also indicated in the figure is the underlying value of each model. The values associated with each of the models should not be seen as mutually exclusive. If the belief is that the one is universally more important than the other the managerial behaviour would persist in the paradigm of one model without considering the value of any other (Quin and others, 1996:14). Such a belief and the choice of superiority, consciously or unconsciously, will inhibit the manager's and the organisation's potential for effectiveness.

Figure 2.2 indicates the relationship between the different management perspectives on two axes as well as the underlying value of each perspective.

Figure 2.2 THE RELATIONSHIP BETWEEN THE DIFFERENT MANAGEMENT PERSPECTIVES



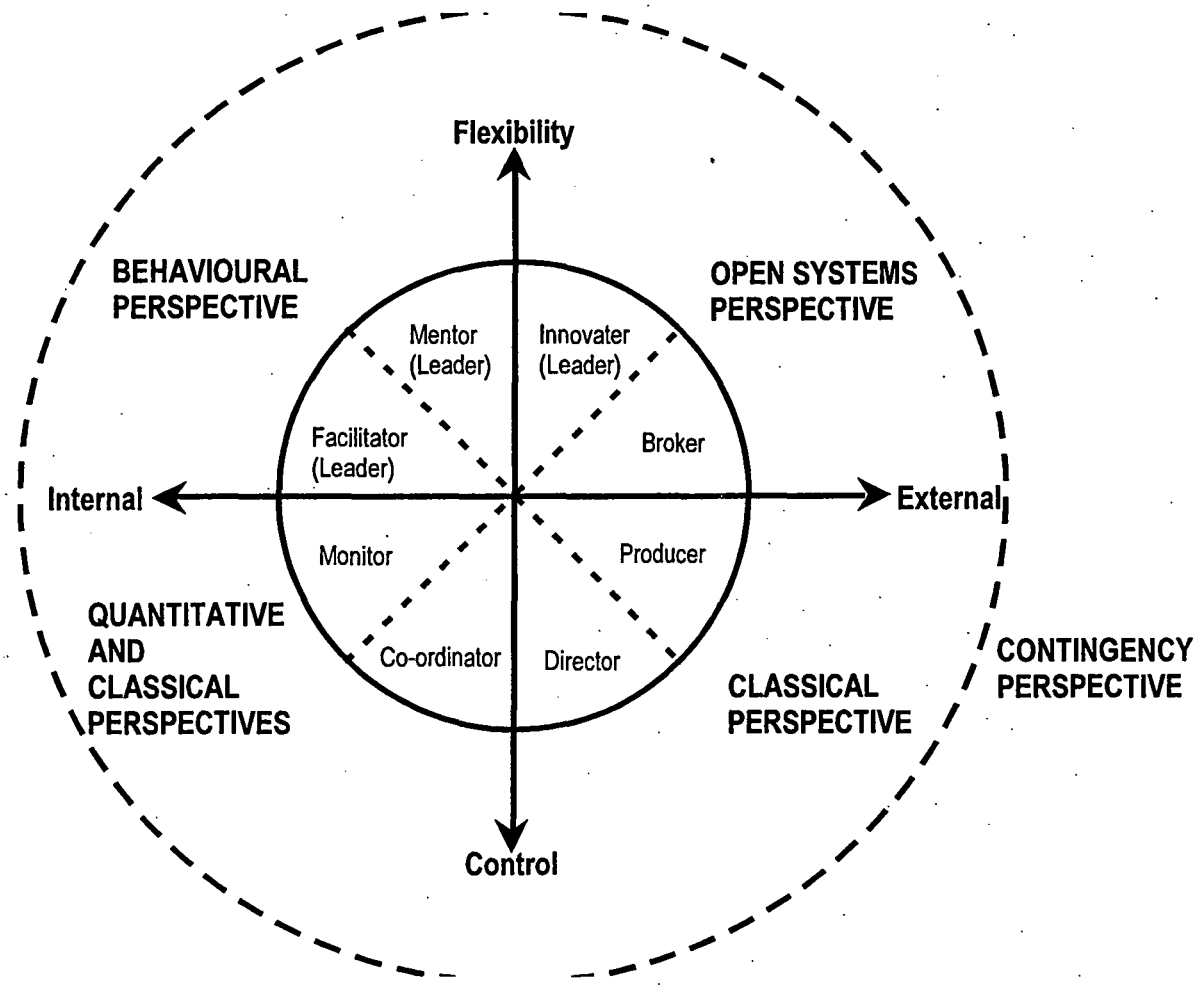
(Adapted from Quin and others, 1996:12)

The vertical axis, figure 2.2, indicates a continuum with orientation to flexibility and control as different poles. The horizontal axis, on the other hand, indicates a continuum with poles representing an internal organisational focus on the left and an external organisational focus on the right. Each model for management, as previously discussed, fits in one of the four quadrants. (Also refer to table 2.3)

Whereas the above figure indicates the relationship of the various perspectives on the axis together with the underlying value of each perspective, will the

relationships of the various perspectives with the associated role for management to each perspective, be indicated on figure 2.3.

Figure 2.3 DIFFERENT MANAGEMENT PERSPECTIVES WITH ASSOCIATED ROLES FOR MANAGEMENT.



(Adapted from Quin and others, 1996:16)

The competing values framework is a model for management based on the contingency perspective to management. Thus, the competing values framework, as management model, can only contribute to organisational effectiveness if the values associated with each of the models of management included in the framework are considered as mutually inter-related or inclusive. No one model that is integrated into the framework should be considered to be universally more

important than the other (Quin and others, 1996:14). Quin and others (1996:14) continues to argue that there are three qualifiers that are required by managers in implementing such an approach. These are:

- The values and weaknesses of each model of management have to be appreciated.
- It is necessary that knowledge, skills and attitudes (competencies) associated, with each model, have to be acquired.
- It is necessary that competencies associated with each model have to be dynamically and integratively applied to all managerial situations encountered.

The above mentioned qualifiers lay a foundation for a conceptual context to the competing values framework as well as to the contingency approach to management. This conceptual context consists of cognitive and behavioural dimensions (Quin and others, 1996:14). A manager will, according to Quin (and others, 1996:14), learn at a cognitive level when he / she understand and appreciate both the values and weaknesses of each model for management. In doing so, the manager increased his / her cogni
tive ability to analyse a phenomenon from various perspectives (Quin and others, 1996:14). However, knowledge or cognitive ability in isolation is however, as indicated in section 2.1, is not an indication of competency, but rather the combination of knowledge, skills and ability (see Goldstein, 1993:62).

Quin (and others, 1996: 15) continues by stating that cognitive ability alone is not directly associated with effective management. Effective management requires a combination of cognitive ability with behavioural complexity, which in turn implies the capacity to draw upon guidelines for behaviour associated with different models of management. Such behavioural complexity includes cognitive complexity and is the ability to act out a cognitively complex strategy by playing multiple roles in an integrated and complementary way (Quinn, Spreitzer, and Hart cited by Quin and others, 1996: 15).

It is necessary, in conclusion, to single out four important characteristics of the competing values framework.

- The competing values framework considers no model of management more important than another, but a mutually inclusive/inter-related approach should be adopted which is dependent on each phenomenon as it arises.
- The competing values framework does not prescribe universal management behaviour which has to be applied in all phenomenon as it arises, management should rather develop an understanding of the strengths and weaknesses of the various models of management and develop the cognitive ability to analyse a phenomenon from various perspectives.
- The competing values framework requires from managers behavioural complexity that implies (demands) the capacity to base their behaviour upon guidelines for behaviour associated with different models of management.
- It is necessary, for the application of the competing values framework, that competencies that are associated with each model of management, inclusive to the framework, are to be dynamically and integratively applied to all managerial phenomenon encountered.

2.6 CONCLUSION

The above four characteristics of the competing values framework establish this framework as an ideal conceptual framework by which specific managerial competencies for Warrant Officers in the South African Navy can be researched. Furthermore, it will be indicated in Chapter 3: Requirements for models of management from the Department of Defence, that the Department of Defence adopts an integrated approach to management. This suggests that the Department adopts the view that there is no universal model of management which can be applied to all situations in a changing environment.

The competing values framework will be used as the conceptual framework for the clustering of management functions and tasks in the remainder of the research.

CHAPTER 3:
REQUIREMENTS FOR MODELS OF MANAGEMENT OF THE DEPARTMENT OF DEFENCE

3.1 INTRODUCTION

It was stated in Chapter 2 that individual competency "fits" in a conceptual structure which consists of sub-categories of national core competence, organisational core competence, organisational strategic competence, occupational and finally, related to the previously mentioned competencies, individual competence. Individual competence is related to a vocation within the organisation.

It was also indicated in chapter 2, that management competency is an occupational competency and is contextually bound. This means that it would be difficult to develop a universal inventory of management competency, which will be valid for organisations all over the world. It is, however, argued that the organisational core and strategic competence, in the reference to the conceptual structure of competence, will form the context for both vocational and occupational competencies in the organisation. In other words, an inventory for management competency must be developed in relation to the desired / required management function of the organisation as whole.

The various requirements that the Department of Defence states for models of management will be outlined in this chapter. This information will provide a contextual boundary for the development of a management task inventory for Warrant Officers in the South African Navy.

3.2 REQUIREMENTS OF THE DEPARTMENT OF DEFENCE

The organisational core competency of the South African National Defence Force, as discussed in section 2.2.2, is prescribed by Parliamentary mandate as primarily to defend South Africa against external military aggression.

The organisational strategic competency, technologies, processes and abilities necessary to attain core competence, was decided upon through a process of consultation by Parliament, members of the public, non-governmental organisations, and the Department of Defence and eventually stated as policy in the White Paper on Defence (Defence in Democracy, 1996). This policy framework sets the context for further action regarding management, leadership, and command in the South African National Defence Force.

Guidelines for management, leadership and command, within the context of the White Paper on Defence as well as the White Paper on the Transformation of Public Service (1995), was accepted by the Defence Secretariat Board and the Defence Command Council (Department of Defence, 1995:1-2). The guidelines are:

- An integrated, defined and practised concept of leadership, command/directing and management must be developed.
- Unity of command must be complied with.
- Dynamic communication (top-down, bottom-up) must be established.
- A military culture entrenching productivity and quality must be established.
- A performance based management process must be implemented.
- High work satisfaction and individual growth must be encouraged.
- Professional conduct and competence must be developed.
- Career management must be given priority.
- People must be empowered to perform.
- Physical, psychological and spiritual needs must be well-cared for.

- A conviction and willingness to serve must be developed.

The following requirements for a model of management, leadership and command was derived (Department of Defence, 1995:1-3) from the above-mentioned guidelines:

The leadership philosophy must
ensure repeated visioning;
sustain a positive culture and work climate;
promote positive motivation;
unleash the potential of individuals, and;
be based on the strength of values.

The command philosophy must
ensure quality in decision-making;
focus on mission accomplishment;
promote autonomy and accountability;
ensure legal accountability, and
maximise the readiness of human and other resources.

The management philosophy must
promote employee satisfaction and individual growth;
enhance efficiency and effectiveness;
prioritise cost-benefit / value-adding functions and activities;
ensure optimal productivity and improvement;
ensure equality;
promote a performance-based culture, and
allow learning and exposure.

Stemming from the above guidelines and requirements, the Department of

Defence has drafted principles regarding the general management processes (Department of Defence, 1995:2-1).

Aim, goals, and objectives.
Delegation and decentralisation.
Dynamic organisational structures.
High involvement of employees.
Clear line of authority.
Measuring performance.
Value driven organisation culture.
Human resource development.
Management of total quality.
Learning organisation.
Managing change and diversity.
Management information system.

The Department of Defence added a primary qualifier to the above guidelines which states that the adopted model of management should integrate the concepts of leadership, management and command (Department of Defence, 1995:2-1). This qualifier indicates the awareness of the necessity to adopt a management / leadership / command approach that is not typically schooled on a specific model for management / leadership / command.

Such a holistic approach is evident in the requirements stated for each the management, leadership and command models. For example: The criteria set for a management model is typically representative of various models of management as developed through the years. It does not specify nor does it rely on one single model / school / paradigm for management, while stating the generic requirement for enhanced efficiency and effectiveness.

The awareness not to restrict oneself to a specific model for management is further illustrated by paring the principles provided by the Department of Defence

for the management philosophy with the perspectives to management which were developed through the years. The requirements in philosophy for equality and the promotion of employee satisfaction and individual growth can directly be associated with the human-relations model for management. The focus to prioritise cost-benefit / value-adding functions and activities can be linked to both scientific management models and also to the open systems approaches. The open systems approach can also be associated with the criteria for the assurance of optimal productivity and improvement. The criteria for performance based culture and a learning environment are typically associated with the open systems and human-relations approaches to management. (Refer to Table 3.1 for associations between the principles regarding models of management provided by the Department of Defence and various perspectives to management as developed through the years.)

Table 3.1 ASSOCIATIONS BETWEEN THE PRINCIPLES OF MODELS OF MANAGEMENT PROVIDED BY THE DEPARTMENT OF DEFENCE AND VARIOUS PERSPECTIVES TO MANAGEMENT

PRINCIPLES OF MODELS OF MANAGEMENT PROVIDED BY THE DEPARTMENT OF DEFENCE	ASSOCIATION WITH PERSPECTIVES TO MANAGEMENT
Aim, goals, and objectives.	Classical perspective
Delegation and decentralisation.	Classical perspective
Dynamic organisational structures.	Open systems perspective
High involvement of employees.	Behavioural perspective
Clear line of authority.	Classical perspective
Measuring performance.	Quantitative perspective
Value driven organisation culture.	Behavioural perspective
Human resource development.	Behavioural perspective
Management of total quality.	Open systems perspective
Learning organisation.	Open systems perspective
Managing change and diversity.	Behavioural perspective
Management information system.	Quantitative perspective

The associations made in the above table indicate that the Department of Defence, in its requirements for a model for management, adopts an integrated approach to management. By adopting such an approach the Department suggests that there is no universal model for management which can be applied to all situations in a changing environment.

3.3 CONCLUSION

The principles, guidelines and requirements provided by the Department create a **contextual framework** in which management functions in the organisation, as a whole, have to be performed. This framework will be the organisational context or parameters by which the researcher will develop an inventory of management behaviour to ultimately identify management competencies. The Competing Values Framework, as discussed in section 2.5.2, will be the **conceptual framework** for the task/function clustering.

CHAPTER 4:
A DRAFT MANAGERIAL TASK INVENTORY

4.1 INTRODUCTION

The research is divided into three sections: Forecasting, Testing, and Analysis. **Chapter 2** dealt with a theoretical discussion of the concept "competency", as well as a discussion on different models of management that concluded in an integrated model for management. This integrated model for management will form a conceptual basis for the development of a managerial task inventory. **Chapter 3** indicated requirements that the Department of Defence insists for in the management function within the organisation. These requirements will form the contextual framework in which the managerial task inventory is developed. This chapter, **Chapter 4**, will conclude the forecasting section by providing a Draft Managerial Task Inventory, henceforth DMTI, and an explanation of the process through which the DMTI for Warrant Officers was compiled. **Chapter 5** will describe the testing of the task inventory and the results thereof.

4.2 A DRAFT MANAGERIAL TASK INVENTORY

With the aim to develop a management competency profile[4], the first step that had to be taken, was to identify predicted management tasks which have to be performed by Warrant Officers. The researcher made use of a combination of **two approaches**[5] in compiling the final inventory of predicted managerial tasks. A

---

[4] A matrix of identified knowledge, skills, and ability that is necessary for an incumbent to perform tasks at a desired level of performance.

[5] A deductive approach was used to compile the Draft Managerial Task Inventory. The second approach, a questionnaire approach, was adopted to test the Draft Managerial Task Inventory for content validity. This test with the necessary corrections to the Draft Managerial Task Inventory

deductive approach to job analysis, as described by Shippmann, Prien, and Hughes (1991:327-329), was used to deductively identify predicted managerial functions, jobs and tasks, critical to the managerial function of Warrant Officers. This deductive approach resulted in the compilation of the DMTI. The content of this table was eventually submitted in both the preliminary and final data collection process to be tested for content validity. The conceptual framework of management function, as discussed in section 2.4.3, as well as the contextual framework, as discussed in section chapter 3, provided the **boundaries for task identification via the deduction process**. The predicted critical managerial functions, jobs and tasks are indicated in table 4.1.

Table 4.1 DRAFT INVENTORY OF PREDICTED MANAGERIAL FUNCTIONS, JOBS AND TASKS FOR WARRANT OFFICERS IN THE SOUTH AFRICAN NAVY.

FUNCTION OF MANAGERIAL LEADER	JOB CLUSTERING		TASK STATEMENT
Manager as leader	Create, affirm and develop direction in the work environment	1	Create an awareness of the organisational vision among subordinates and ordinates through discussion and presentation in order to align work effort.
		2	Assist in facilitation work sessions during which departmental vision and mission statements are developed in a collaborative way.
	Act as mentor for subordinates	3	Maintain a conceptual awareness of the inter-relation between the goals of his/her department in relation to subordinate, ordinate, and superordinate goals of other departments in the organisation.
		4	Contribute to the improvement of group dynamics within the immediate work environment in order to maintain and develop efficient group functioning.
		5	Observe and evaluate the performance of subordinates for the purpose of constructive informal feedback or recognition.

resulted in the Managerial Task Inventory.

Table 4.1 (Continued) DRAFT INVENTORY OF PREDICTED MANAGERIAL FUNCTIONS, JOBS AND TASKS FOR WARRANT OFFICERS IN THE SOUTH AFRICAN NAVY.

		6	Provide verbal and/or nonverbal feedback on individual performance of subordinates.
		7	Assist subordinates to reflect on their own performance in order to develop more effective ways to perform related tasks in the future.
Co-ordinator and Monitor	Monitor, maintain, and develop customer focus to improve service delivery	8	Determine requirements in resources in the department in order to maintain a level of resources to ensure the effective functioning of the department.
		9	Investigate and determine customer's requirements in the service / products provided by the department.
		10	Evaluate the use of resources in the department in order to maintain a level of resources to ensure the effective functioning of the department.
		11	Receive and evaluate feedback from clients in order to make written and/or verbal recommendations to superordinates regarding work processes.
		12	Evaluate, maintain and suggest improvements to the system operations of the department in order to meet requirements set by customers as well as functional specifications to products or services.
		13	Create an environment of collaboration in order to enhance conditions for productive work amongst subordinates.
Facilitator	Create, affirm, and develop effective working relationships	14	Orientate new employees to group work processes, work standards, work norms and values.
		15	Provide non-verbal feedback (formal) on good or improved individual performance of subordinates in order to develop more effective ways to perform related tasks in the future.
		16	Receive requests, complaints, and grievances from subordinates and process it according to the policy laid down by the DOD in order to effectively solve work-related requests and problems.
		17	Conduct disciplinary interviews.

Table 4.1 (Continued) DRAFT INVENTORY OF PREDICTED MANAGERIAL FUNCTIONS, JOBS AND TASKS FOR WARRANT OFFICERS IN THE SOUTH AFRICAN NAVY.

		18	Initiate disciplinary procedures according to guidelines set by the Department of Defence.
		19	Establish and maintain trust of ordinates, subordinates and superordinates in order to affirm effective working relations.
		20	Identify and manage interpersonal conflict in order to maintain a productive working environment.
	Contribute and support subordinate career planning and development	21	Identify the need for in-post training and plan the implementation thereof.
		22	Conduct individual appraisal interviews of subordinates in order to establish career development opportunities.
	Contribute in recruitment and selection of personnel	23	Evaluate workloads, priorities, and activities in order to recommend personnel requirements.
		24	Assist in conducting selection interviews to identify possible work team incumbents.
Director	Gather, disseminate, and prioritise information	25	Monitor work processes and identify problem areas by using scientific management techniques.
		26	Gather information regarding problem areas in work processes in order to evaluate alternative actions for the improvement of such processes.
	Share and evaluate information to solve problems and make decisions	27	Make verbal and visual presentations to sub-, super-, and ordinates in order to share and evaluate information.
		28	Facilitate staff meetings with ordinates and subordinates in order to solve problems.
		29	Identify and verbally / non-verbally communicate with stakeholders in work processes in order to share information for effective decision making.
	Plan, allocate and assess work carried out by teams and individuals	30	Formulate, evaluate, and update work objectives for teams and individuals by means of a participative process in order to meet set goals.
		31	Evaluate information in order to develop alternative actions for the improvement of problem areas in work processes.

Table 4.1 (Continued) DRAFT INVENTORY OF PREDICTED MANAGERIAL FUNCTIONS, JOBS AND TASKS FOR WARRANT OFFICERS IN THE SOUTH AFRICAN NAVY.

		32	Allocate work to teams and individuals in order to meet objectives.
		33	Evaluate team and individual performance against objectives.
		34	Provide informal feedback to teams and individuals on their performance in order to improve work effectivity.
	Secure and allocate resources for work activities	35	Make verbal and visual presentations to super, and ordinates in order to secure resources for activities.
		36	Motivate the use of resources necessary to attain objectives.
Innovator	Identify opportunities for, and facilitate change	37	Evaluate work processes, identify and recommend opportunities for change in procedures.
		38	Plan and implement change initiatives in order to meet objectives.
Producer	Monitor and control the use of resources	39	Identify causes of low or poor quality in order to improve work processes.
		40	Identify and determine kinds, quantity and causes of waste in order to improve work processes.
		41	Encourage, receive, and process suggestions from subordinates regarding improvements in work processes.
		42	Monitor and control cost against budgets.

Other references used for the task identification were the research, in job analysis, completed by Noe and others (1994:465), Quin and others (1996:11-24), Critten (1993:71-81), Dowel & Wexley (1978:565-567), and Sanchez & Fraser (1994:314-323). Table 4.2 provides more information regarding the research.

Table 4.2 SOURCES USED IN THE DEVELOPMENT OF THE DRAFT MANAGERIAL TASK INVENTORY.

RESEARCHER	NUMBER OF IDENTIFIED ITEMS	AMOUNT OF JOB CLUSTERS
Dowel and Wexley	Identified 100 work activities	100 identified work activities were clustered in 7 dimensions of management activity.
Sanchez and Fraser	Developed a 54 item inventory of job duties covering 70 job titles over 9 job levels at an aviation company.	
Quinn and others	Identified 24 key competencies for managers.	The identified key competencies were clustered in 8 areas of management competency.

The following guidelines were adhered to in the task identification process:

- The items had to represent work activities and not individual traits, abilities, or technical knowledge.
- The items should be occupational (management) specific and not vocation specific (mustering) and should also be generic to the position of Warrant Officer.
- The items have to be within the parameters of requirements from the Department of Defence's guidelines for management and leadership.

Besides the identification of the predicted tasks, task statements had to be generated which would describe each predicted task as identified.

Guidelines set by Goldstein (1993:57-58) for writing and specifying of tasks were adhered to during the actual writing of the task statements. These guidelines are as follows:

- A direct and neutral style should be followed without reference to either

outstanding or poor performance.

- Each statement should start with a functional verb.
- Each statement should describe what the worker does, how and to whom/what and why the worker does it.
- Do not include separate tasks in the same statement unless they are always performed together.
- The tasks should be stated completely, but should not be so detailed that it becomes a time-and-motion study.

4.3 CONCLUSION

The Draft Managerial Task Inventory that is provided in this chapter is tested for content validity while the tasks were evaluated to determine the critical value of each task. The process of the testing and evaluation are explained in the following chapter, Chapter 5.

CHAPTER 5:
DATA COLLECTION

5.1 INTRODUCTION

The discussion in the previous chapter dealt with the compilation of a draft managerial task inventory, which after being tested for content validity, would provide the basis from which the managerial competency profile for Warrant Officers is derived. This chapter outlines the methodology used to test the DMTI for content validity.

The test for content validity was completed using a two-stage questionnaire approach. The first stage was a preliminary study to test the methodology while the subsequent second stage was the final data collection process to establish a complete and content valid management task inventory, henceforth MTI. Table 5.1 indicates the different phases in testing the draft managerial task inventory.

Table 5.1 PHASES IN THE TESTING OF THE DRAFT MANAGERIAL TASK INVENTORY.

PRELIMINARY STUDY	FINAL DATA COLLECTION PHASE
▪ Test the methodology of administration of the Managerial Position Analysis Questionnaire. ▪ Identify possible tasks to include as items in the final data collection phase.	▪ Test the content validity of the draft managerial task inventory. ▪ Provide data that will enable the researcher to rank the tasks in order of how critical each task is to work performance in the position of Warrant Officer.

5.2 PRELIMINARY STUDY

A preliminary study was done to trial the intended methodology to use in the final data collection. A second purpose was to identify possible tasks that could be

eliminated or included in the final data collection process. The study was done by submitting a questionnaire (Managerial Position Analysis Questionnaire, henceforth MPAQ), comprising of the total number of tasks generated in the draft task inventory, to a sample group of twenty-four incumbents of Warrant Officer posts.

5.2.1 Method

The MPAQ was administered to a sample group of respondents for the preliminary study had to individually evaluate each task according to two criteria or predictor variables[6]. The first predictor variable was the expected **relevant importance** of the described task to the position of Warrant Officer. The respondents were instructed to evaluate each task using the following numerical scale:

0 = Definitely not a part of the position, does not apply, or is not true.
1 = Under unusual circumstances may be a minor part of the position.
2 = A small part of the position.
3 = A somewhat substantial part of the position.
4 = A major part of the position.
5 = Definitely a major part of the position.

The second predictor variable used in the evaluation was the expected **relative frequency** of performing of each task. Respondents had to evaluate the predicted amount of time spent on each task relative to other tasks performed in the position of Warrant Officer. The numerical scale used to indicate the relevant frequency is as follows:

0 = Never do this task.
1 = Very little time compared to other tasks.
2 = Somewhat less time compared to other tasks.

---

[6] A variable from which a prediction is based (Howell, 1989: 101)

3 = Same amount of time as other tasks.

4 = More time compared to other tasks.

5 = A great deal more time compared to other tasks.

The respective evaluations of the predictor variables gave a respondent evaluated **indication of how crucial each task is** to the managerial position of Warrant Officer. For example: a task that received an evaluation of 4 on the numerical scale for importance, indicates the respondent's perception of how important that specific task is to the managerial position of a Warrant Officer. On the other hand, a task that received an evaluation of 4 on the numerical scale for frequency, could also be considered important. The fact that the task would, in the perception of the respondent, require more time in relation to other tasks is an indication that the completion of such a task is important to achieve a required level of job performance. However, the assumption is made, that a more reliable measure of the importance of a task could be achieved by combining the two predictor variables. It is argued that a higher measure of criterion[7] validity in predicting how critical a task is to job performance can be achieved by combining the respective importance and frequency evaluations in calculating a "critical value" for each task.

5.2.2 Composition of the Managerial Position Analysis Questionnaire

The MPAQ comprised of all the task statements generated for the draft management task inventory. The instructions which accompanied the questionnaire, requested the respondents to evaluate the tasks according to the predictor variables by using the numerical scales as indicated in section 5.1.1. Further information for consideration when evaluating the tasks, was provided in the instructions. It was:

- The items represent work activities and not individual traits, abilities or technical knowledge.

[7] The variable to be predicted by the predictor variables (Howell, 1989: 101).

- The items are occupational (management) specific and not vocation specific (mustering) and should be generic to the position of Warrant Officer.

In total, the MPAQ consisted of a total of 47 task statements of which 4 were repetitions to allow for a test in reliability of respondent response. Additional space, and instructions, was provided in which respondents could reflect upon and evaluate tasks they deemed necessary to be included.

5.2.3 The Sample Group

A sample group of twenty-four incumbents of Warrant Officer posts was selected to administer the preliminary study. This group represented a non-probability sample of convenience since the incumbents were, at the time of the study, attending the MTR 3 course at SAS SALDANHA, Saldanha, during October 1998.

Although all are incumbents in Warrant Officer posts they represent 16 different musterings, or vocational fields, in the South African Navy. It was accepted that the sample is not representative of all incumbents of Warrant Officer posts, but would none the less provide the necessary data required from the preliminary study. The preliminary study, as indicated earlier, was mainly concerned with the methodology of administering the questionnaire as well as the identification of items to possibly include in the final data collection phase. Thus, any measures of reliability in data collected would not have been necessary for the preliminary study.

5.2.4 Results of the Preliminary Study

The sample group consisted of 24 incumbents of which 2 were absent at the time of the execution. The response rate of the remaining 22 incumbents was 100%. The following problems were identified from the responses:

- One questionnaire was not fully completed, which lead to the possible problem that the task statements were not fully understood.

- Four questionnaires had consistent evaluations of the predictor variables for each task which lead to a possibility that the instructions were not fully understood, or that the provided example might have influenced the evaluations made by the respondents.

Upon investigation, by means of an interview with the sample group, the following became apparent:

- The incomplete questionnaire was not due to ambiguous task statements. The respondent indicated that the questionnaire was incomplete due to negligence.
- The task statements were clear to the whole group and the interpretation thereof was consistent.
- A misinterpretation of the instructions and example lead to the consistent evaluations of the predictor variable by four respondents.

No additional tasks were identified, for inclusion to the DMTI, during the preliminary study.

5.3 THE DATA COLLECTION PHASE

A revised MPAQ was submitted to a panel of SME for the final data collection phase. This submission had a dual purpose. The results from this phase would give a **measure of the content validity** to the task inventory and, secondly, the data would allow the researcher to compile an order in ranking of **how critical each task is** to the job performance of a Warrant Officer. This order of ranking would be based on the evaluations of the SME.

5.3.1 Composition of the Managerial Position Analysis Questionnaire

The MPAQ used in the final data collection was similar to the MPAQ used in the preliminary study. The content was the same as that during the preliminary study,

since the aforementioned study did not give any indication of possible tasks to include in the MTPI. The only difference between the MPAQ used in the preliminary study and the MPAQ used in the final data collection phase was an increased number of examples in administering the questionnaire. More examples statements were provided to reduce the possibility of a bias in respondent evaluations caused by the interpretation of a single example as in the case of the preliminary study.

5.3.2 Method

The MPAQ was submitted to a group of SMEs that was different than the sample group used in the preliminary study. The SME had to individually evaluate each task using the same predictor variables used in the preliminary study. The numerical scales for the evaluations were also the same as those used in the preliminary study. The respondents had to evaluate the elements, using their experience and knowledge as basis, but could also include additional tasks as they deemed necessary. Such inclusions would contribute to the content validity of the task inventory.

5.3.3 Procedure for Inclusion of Additional Tasks

The researcher decided on a procedure whereby additional tasks, identified by the SME, would be considered for inclusion to the inventory. An attempt would firstly be made to integrate any additional tasks to the existing tasks. If such an integration was not possible, it constituted an additional task that may have to be included in the inventory.

If the total number of additional tasks was more than 10% of the number of tasks in the draft inventory, the MPAQ with the additions would have been re-submitted to the whole sample group for re-evaluation. Such a procedure of submitting, evaluation, and possible re-submitting and re-evaluation provides the opportunity for respondents to continuously and individually include tasks they deem

necessary. This process of conceptual re-evaluation of the inventory's content will lead to face validity of the inventory (Schutte, 1998).

5.3.4 The Sample Group

As with the preliminary study, the sample group for the final data collection phase was one of convenience. The group consisted of 17 persons from various vocational fields as well as different rank groups in the South African Navy. A requirement for inclusion in the sample group was expert knowledge of the management behaviour required for performance in the position of Warrant Officer in the South African Navy.

Another option to compile a sample group was to make use of a random sample that is representative of all incumbent Warrant Officers as well as the supervisors of incumbents of Warrant Officer posts. This option would have been a lengthy and expensive exercise. The member's involvement and the time period of involvement would render such a sampling method unfeasible. In comparison, the use of selected experts on the subject, a sample of convenience, allows for minimal disruption to the organisation itself. Thus, the number of people involved in the data collection phase is reduced with an accompanying reduction in the costs of the research. Such costs include generating, distributing and processing the data collection instrument and also the costs associated with large numbers of people, in management positions, spending time generating the information.

The practise of using SME in job analysis is widely accepted. Landy and Vasey (1991:29) argue that the concept of the subject matter expert has replaced the single job analyst. The motivation for this is that instead of one knowledgeable person gathering and integrating the information, a sample of experts can be used which increases the amount of "observations" regarding the job that is under study. Landy and Vasey continues to argue that it is possible, by using a methodology based on SME, to adopt a quasi-clinical approach by combining information using professional judgement and experience to evaluate the relative

importance and frequencies of tasks. Furthermore, the use of SME samples allows for statistical analysis of the results on an empirical rather than clinical basis.

The decision whether to use a SME sample or another source of information, for example a representative sample of supervisors, also depends on the intended application of the data (Prien and others, 1987:68-69). Schneider and Konz (in Noe and others, 1994:168-179) illustrates this qualifier by using a SME sample group in strategic job analysis to specify the tasks required for job performance for a job as predicted to exist in the future. The member's knowledge of possible influences that may result in changes to the job under study was, in this particular case, the underlying qualification for inclusion in the SME sample.

The resulting question in selecting a SME samples is; when can a member of the sample group be regarded as an expert? The member should have an understanding of the job under study and must also have the opportunity to observe effective and ineffective performance in the job (Prien and others, 1987: 68-69). In a more strategic approach, like the approach followed by Schneider and Konz (in Noe and others, 1994: 168-179), a broader criterium was used in selecting the SME members. Schneider and Konz placed emphasis on the member's knowledge of possible influences that may result in changes to the job under study. Landy and Vasey (1991: 30) provide a fundamental and underlying qualifier of "expert" status by stating that an expert can be considered as any person that can provide accurate and complete information about the duties under consideration.

The SME sample members in this study were selected on the following basis:

- Knowledge of the position under study
- Experience in supervising incumbents of Warrant Officer positions
- Experience occupying the position of Warrant Officer

- Knowledge of possible changes in requirements to the position under study due to the ongoing transformation in the Navy
- Academic knowledge of requirements to management within the context of the SANDF Management Doctrine.

The sample group used in the final data collection process consisted of 17 persons, which were selected on the basis of the above qualifiers. The eventual sample represents members occupying academic posts in Military Management and Industrial Psychology at the SANDF Military Academy, as well as members of the SAN Management Services who are instrumental in work studies regarding the organisation of the "transformed navy" as well as management training & development throughout the Navy. Career development and management practitioners, responsible for Warrant Officer career paths, were also included. These practitioners are representative of the different vocational fields in the Navy and are also incumbents of Warrant Officer positions. A number of additional members were included, to the sample group of 17, who respectively occupy senior positions in the Human Resource Department of the Navy, the Training Section of this department and senior positions in one of the larger Units in the Navy.

Table 5.2, on the following page, indicate the characteristics of the SME.

Table 5.2 CHARACTERISTICS OF THE SUBJECT MATTER EXPERTS.

SUBJECT MATTER EXPERT	KNOWLEDGE OF THE POSITION	EXPERIENCE SUPERVISING INCUMBENTS	EXPERIENCE OCCUPYING THE POSITION	KNOWLEDGE OF POSSIBLE CHANGES	ACADEMIC KNOWLEDGE
1	■	■		■	
2	■	■		■	
3	■	■		■	■
4	■	■			■
5	■	■		■	■
6	■	■			
7	■				■
8	■				■
10	■		■	■	
11	■		■	■	
12	■		■	■	
13	■		■	■	
14	■		■	■	
15	■		■	■	
16	■		■	■	
17	■		■	■	

■ Indicates that the characteristic as indicated at the top of the column is present at the specific SME.

5.4 CONCLUSION

The MTI is considered content valid since no additional tasks were added using the procedure that is explained in section 5.2.4. The MTI was subsequently used to develop the MPAQ, which was submitted to 17 SME members for evaluation. The data obtained from the evaluations are analysed and interpreted in the following chapter, Chapter 6.

CHAPTER 6:
ANALYSIS OF DATA AND INTERPRETATION OF RESULTS

6.1 INTRODUCTION

The aim of this research is to determine expected management competencies for Warrant Officers in the South African Navy. It was also argued that such knowledge would allow educational staff to assess training needs, design suitable training programmes and also determine whether such training will be viable in terms of resources available.

It was also argued, in the Introduction (section 1.1), that the research design is divided into three related phases. The first was the Forecasting phase that entailed the development of a draft inventory of predicted managerial tasks. This draft inventory was tested in the second phase; Testing, to produce a content valid inventory of management tasks expected to be performed by Warrant Officers. The last phase in the research design was to Analyse the data generated in the testing phase.

6.2 ANALYSIS OF DATA

The results of the data collection were analysed focussing on the following aspects:

- The content validity of the inventory,
- internal reliability of the data and
- the reliability of the evaluators.

6.2.1 The Content Validity of the Inventory

Content validity implies that the inventory represents all content items that it has to represent (Rosnow & Rosenthal, 1996:130). Thus, for the MTI to be content valid it has to represent all relevant tasks to management behaviour for Warrant Officers in the South African Navy.

A premise of this research design was that through conceptual re-evaluation of the DMTI and procedural inclusion of additional items, as per the procedure described in section 5.2.3, the content of the inventory would attain face validity (Schutte, 1998).

There were, as in the case of the preliminary study, no additional items identified for possible inclusion by the SME during the final data collection phase. Thus, the inclusion procedure, described in section 5.3.3 was not used and there was no necessity for re-evaluation(s) by the sample SME. The decision can therefore be made that the MTI as presented in the MPAQ is content valid.

6.2.2 Internal Reliability of the Data

The first test to determine the reliability of the data was done by means of a parallel test to establish the consistency in the respondents scores in evaluating the task statements. Four task statements were repeated in the MPAQ, simulating a parallel test, to provide data for this analysis.

The measure of consistency in scoring the four repeated statements was collectively calculated for each repetition. The first scores were considered as the true score (T) while the second scores were considered as error scores (E). The measure of reliability or consistency (C) in the two scoring opportunities was expressed as a ratio of the difference between the T and E to the maximum possible score. The error in consistency in the scoring of the repeated statements is eventually expressed as a percentage. This percentage in error is calculated by

dividing the difference between the mean, of all the evaluators, of T, with the mean, of all the evaluators, of E with the maximum possible score and to multiply the result with 100. The result provide a percentage error between the two scores expressed as percentage to maximum score. A small percentage error score indicates a small difference between T and E. (Bezuidenhout, 1999) Tables 6.1 and 6.2 provide the percentage errors in mean evaluation scores.

Table 6.1 VARIANCE IN MEAN EVALUATIONS OF TASK IMPORTANCE.

TASK STATEMENT	MEAN OF THE TRUE SCORES	MEAN OF THE ERROR SCORES	ERRORS IN CONSISTENCY
A	3.824	3.765	1.18%
B	3.824	3.824	0%
C	3.882	3.765	2.34%
D	3.765	3.824	1.18%

Table 6.2 VARIANCE IN MEAN EVALUATIONS OF TASK FREQUENCY.

TASK STATEMENT	MEAN OF THE TRUE SCORES	MEAN OF THE ERROR SCORES	ERRORS IN CONSISTENCY
A	2.647	2.412	4.7%
B	3.176	2.941	4.7%
C	2.706	2.706	0%
D	3.118	3.235	2.34%

The errors in consistency (C) indicated in tables 6.1 and 6.2 can be interpreted, in real terms, as follows: A 0% error indicates no variance between the true and error scores, a 1% error is similar to a 0.05 variance between the true and error scores, a 3% error represent a variance of 0.15 in mean scoring opportunities while a 5% error is equal to a variance of 0.25 in mean scoring opportunities.

The researcher, considering the small values of C, accepts that the respondents were sufficiently consistent in scoring the parallel test and on the basis of this accepts the reliability of the scoring of the MPAQ as a whole.

6.2.3 The Reliability of the Evaluators

The purpose for the evaluation of the MPAQ by the SME members was to establish content validity in the MPI as well as to evaluate individual task statements to provide data that is used to determine a critical factor for each task. The content validity of the MPI was discussed in section 6.2., during which it was mentioned that no procedural inclusion was necessary after the first evaluation by the sample group of SMEs.

Although the task inventory is considered valid, it is still necessary to determine the reliability of the evaluators in the scoring of the different task statements. Knowledge of how reliable the evaluations made by the SME sample group was, would influence the reliability of any order in ranking of the importance of the various management competencies for Warrant Officers.

One measure of determining the reliability of the evaluators is to determine the consistency in the SMEs scores in evaluating all the tasks (Cozby, 1993:30). Thus, a measure of consistency in how the whole SME sample scored each task statement would be a reflection on the reliability of the evaluations.

The calculation of standard deviation would be sufficient for a measure in consistency since the results of such a calculation would indicate the dispersion of scores relative to the mean score for each statement (Cozby, 1993:142). A small standard deviation would indicate that most group members evaluation scores fell close to the mean, whereas a large deviation indicates that the scores are more dispersed. (Howell, 1989:59) In fact, the size of the standard deviation will indicate the degree to which the sample group agrees or disagrees on evaluation made on

both the predictor variables. Tables 6.3 and 6.4 illustrate the consistency in scores of importance and frequency.

Table 6.3 CONSISTENCY IN SCORES OF TASK IMPORTANCE.

TASK STATEMENT	MEAN SCORE	MEDIAN SCORE	STANDARD DEVIATION
1	3.941	4	0.827
2	3.470	3	1.078
3	3.529	4	0.799
4	4.118	4	0.781
5	4.529	5	0.624
6	4.353	4	0.606
7	3.765	4	0.752
8	3.706	4	0.772
9	4.059	4	0.899
10	3.941	4	0.556
11	4.176	4	0.728
12	4.235	4	0.752
13	4.412	4	0.618
14	3.824	4	0.951
15	3.824	4	0.951
16	4.353	5	0.932
17	3.765	4	0.903
18	3.824	4	0.728
19	3.647	3	1.115
20	4.412	5	0.712
21	4.000	4	1.000
22	3.882	4	0.858
23	3.824	4	1.015
24	3.941	4	1.197
25	3.765	4	0.903
26	3.177	3	1.237
27	3.470	4	1.179
28	3.470	4	0.700
29	4.118	4	0.781
30	3.647	4	0.702
31	3.882	4	0.928
32	3.824	4	1.015
33	3.882	4	0.697
34	3.706	4	0.772
35	3.882	4	0.993
36	3.824	4	0.809
37	3.882	4	0.858
38	3.412	3	1.004
39	3.882	4	0.928
40	4.177	4	0.809
41	4.118	4	0.697
42	4.118	4	0.858
43	3.941	4	0.899
44	4.235	4	0.752
45	3.882	4	0.858
46	3.764	4	0.664
47	3.824	4	0.636

Table 6.4 CONSISTENCY IN SCORES OF TASK FREQUENCY.

TASK STATEMENT	MEAN SCORE	MEDIAN SCORE	STANDARD DEVIATION
1	2.529	2	1.007
2	2.353	2	0.996
3	2.882	3	0.928
4	3.412	4	1.004
5	3.647	4	0.702
6	3.353	3	0.786
7	3.118	3	0.697
8	3.059	3	0.827
9	2.941	3	0.899
10	3.353	3	0.702
11	3.471	4	0.624
12	3.235	3	0.903
13	3.647	4	0.702
14	2.647	3	1.057
15	2.765	3	0.831
16	2.647	3	1.272
17	2.353	2	1.115
18	3.235	3	0.664
19	2.588	3	1.176
20	3.412	3	1.121
21	3.000	3	0.935
22	3.000	3	0.935
23	2.706	3	0.985
24	3.086	3	1.088
25	2.412	2	0.795
26	2.177	2	0.951
27	2.765	3	1.348
28	3.177	3	0.883
29	3.294	3	1.160
30	2.706	3	0.849
31	3.000	3	0.866
32	3.059	3	0.748
33	2.941	3	0.748
34	3.235	3	0.831
35	3.000	3	1.000
36	3.176	3	0.809
37	2.941	3	0.748
38	2.824	3	0.809
39	2.706	3	0.849
40	3.177	3	1.015
41	3.353	3	0.996
42	3.235	3	0.970
43	3.000	3	0.935
44	3.177	3	1.015
45	3.059	3	1.029
46	2.706	3	0.772
47	2.941	3	0.827

It is evident from Tables 6.3 and 6.4 that some elements were evaluated more consistently than others. If the data of table 6.3 is used as an example: The

lowest standard deviation in the evaluation of the importance of tasks is 0.555 while the highest standard deviation is 1.237 (statement no. 26).

Wegner (1995:92) argues that approximately 68% of all observations will fall within one standard deviation of the mean, in a normal distribution. If the assumption is made that the evaluations represent a normal distribution, one can argue that 68% of the evaluators scored statement no. 26 (table 6.3) between 1.764 and 4.236 on the task importance criterion. This is a high range in evaluation for a supposedly generic/universal management task.

If the average standard deviation for evaluations regarding task importance of all elements is considered 0.849, it can be argued that 68% of the average score in evaluation is within a range of 0.849 from the median score. Although this figure is an average, which is influenced by higher and lower extremes in evaluations, the researcher is willing to accept this as a reliable account considering the following:

A standard deviation of 0.849 is comparable with a variation of less than one standard evaluation unit, used in the MPAQ. Thus, 68% of the average evaluation would be within one standard evaluation unit from the mean evaluation.

The sample of SME members is small, a total of sixteen members, and a dispersion in a small sample group may be expected.

The method of sampling was that of convenience. The members represent various vocational fields as well as rank groups within the South African Navy. These differences may lead to contextual biases in evaluating the elements. The researcher accepts, considering the instruction provided with the MPAQ that the tasks should be considered as generic and not vocation specific tasks together with the range in standard deviation, that contextual biases did occur.

6.3 INTERPRETATION OF RESULTS

This section entails the interpretation of the data presented in tables 6.3 and 6.4 by means of Integrated Statement Analysis. The result of this analysis would be a quantifiable indication of the criticalness of the tasks relative to each other.

6.3.1 The Integrated Standard Analysis

The researcher developed a three dimensional model (Integrated Standard[8] Analysis, henceforth ISA) by which the evaluations of the importance and frequency of each task are combined to attain a criterion variable to work performance. The criterion variable would indicate how critical a task is perceived to be to work performance in the position of Warrant Officer. This factor is indicated on a scale ranging from 0 to 5 whereby a value of five would indicate the highest perception of criticalness while a value of zero indicates that the task is not critical to work performance in the position of Warrant Officer. Such an order in rank of how critical a task is to managerial work performance provides a hierarchy of the importance of tasks and thus competencies that a Warrant Officer should possess.

The ISA Model combines the respective evaluations of the predictor variables, expected importance and frequency, to provide a single value, the criterion variable that indicates the relevant critical factor of each task. The **assumption** is made that tasks with high values would be instrumental to work performance in the position of Warrant Officer and is based on the respondent evaluations of the predictor variables. A premise to this assumption is that the ability to perform tasks with a high critical value would not singularly lead to work performance. The discussion in section 2.3 indicated that the ability to perform a task, or the

---

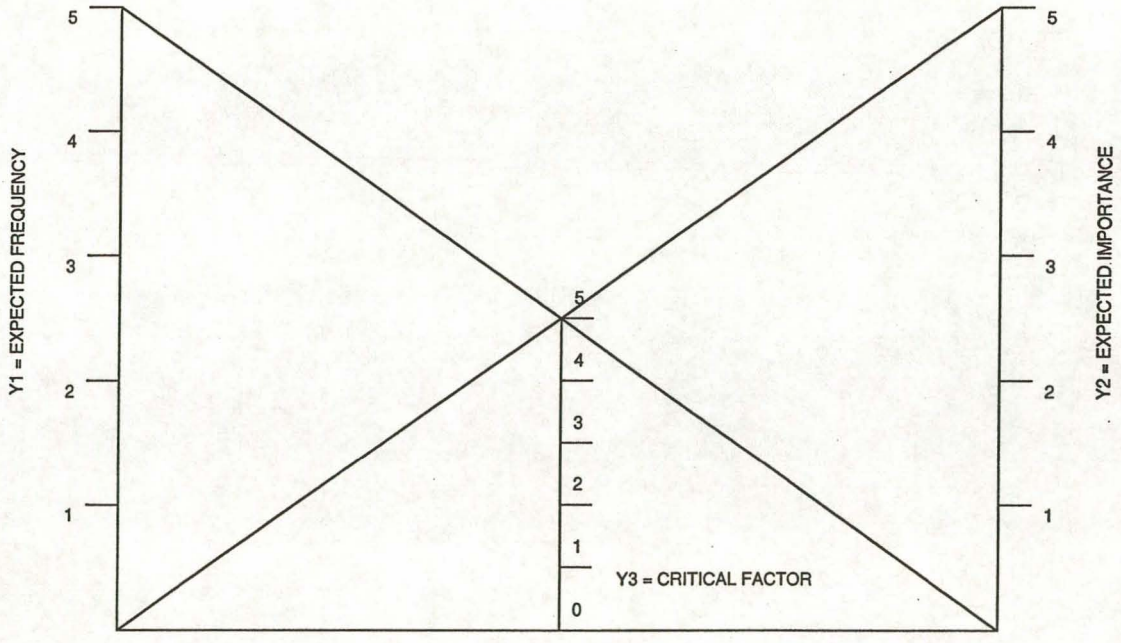
[8] **standard**, a principle of behaviour or morality; a criterion; a definite level of excellence or adequacy required, aimed at, or possible; an overall level achieved.

existence of the required competency, does not necessarily lead to work performance.

Figures 6.1- 6.4 graphically illustrates the ISA Model. The **first dimension**, indicated on the Y1 axis, is the expected frequency of execution of the task. The mean respondent score for the task statements determines the value of this predictor variable. Figure 6.1 illustrates a frequency evaluation of 5, which is the maximum score according to the numerical scale used in the questionnaire.

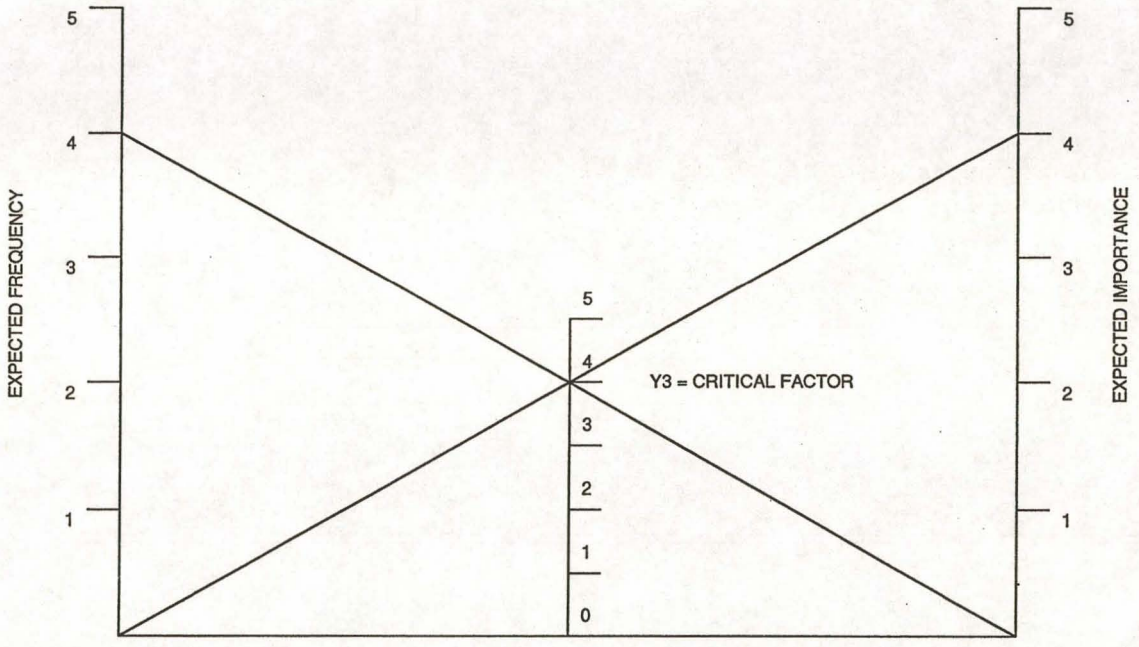
The **second dimension**, indicated on the Y2 axis, is the expected importance of the task to the position of Warrant Officer. The mean respondent score of the task statements also determines the value of this predictor variable. Figure 6.1 illustrates an importance evaluation of 5, which is the maximum evaluation according to the numerical scale used in the questionnaire.

Figure 6.1 MEAN FREQUENCY AND IMPORTANCE SCORES ON THE ISA MODEL.



The **third dimension** is the critical factor, criterion variable, of each task and is indicated on the Y3 axis. The example in figure 6.1 illustrates maximum evaluations of 5 for both predictor variables that lead to the highest possible critical factor of 5. Not all tasks (elements) would receive the maximum evaluation, 5, for the respective predictor variables. Figure 6.2 indicates the ISA Model for an element that received an evaluation of 4 on both predictor variables. The critical value of this specific element would be 4.

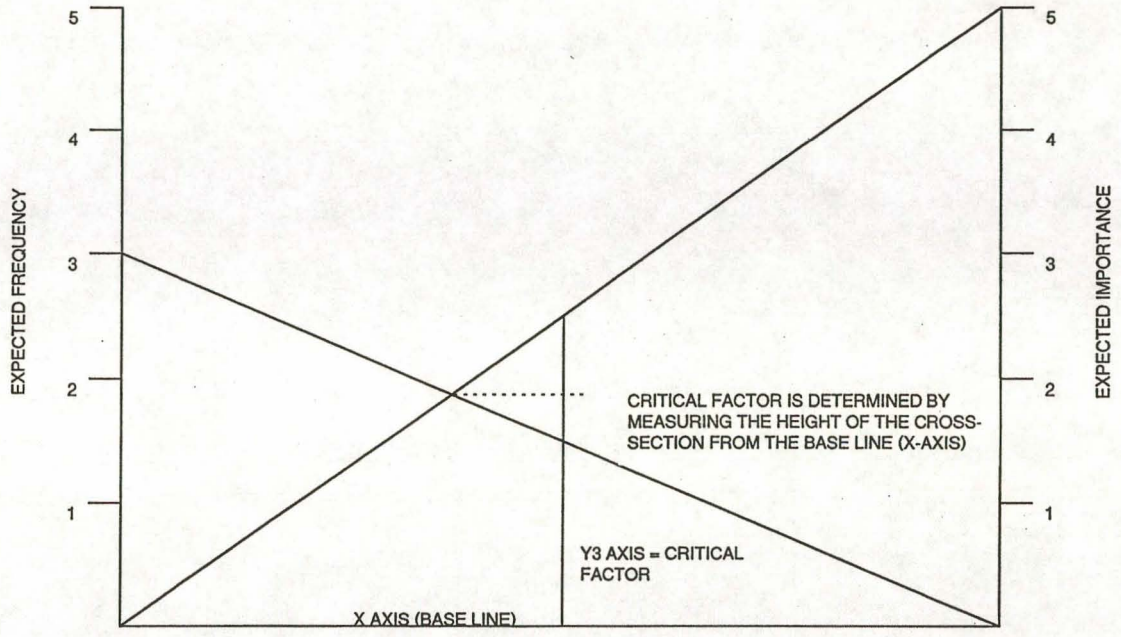
Figure 6.2 ILLUSTRATION OF THE ISA MODEL WITH EVALUATIONS OF 4 FOR BOTH PREDICTOR VARIABLES.



The above examples illustrate the application of the ISA Model for elements that received equal evaluations for both predictor variables. Such evaluations can be considered a "perfect pair" and should be considered as an exception rather than the rule. Table 6.3 illustrates an example according to which the element received evaluations of 5 and 3 respectively for the expected importance and the expected frequency. The cross-section of the lines is not on the Y3 axis as in the case of the prior examples. The cross-section is to the left of the Y3 axis. The critical value can, however still be determined by measuring the height of the cross-

section from the baseline (X-axis). This measurement is attained by drawing a horizontal line linking the cross-section with the Y3 axis. The linkage point with the Y3 axis would indicate the critical value of the element.

Figure 6.3 ILLUSTRATION OF THE ISA MODEL WITH EVALUATIONS OF 5 AND 3 FOR THE RESPECTIVE PREDICTOR VARIABLES.



The application of the ISA Model, as described in the above, results in a critical value, which is considered a **meta-value** that combines the predictor variables and also compensate for high variances in the evaluation of the predictor variables for each element.

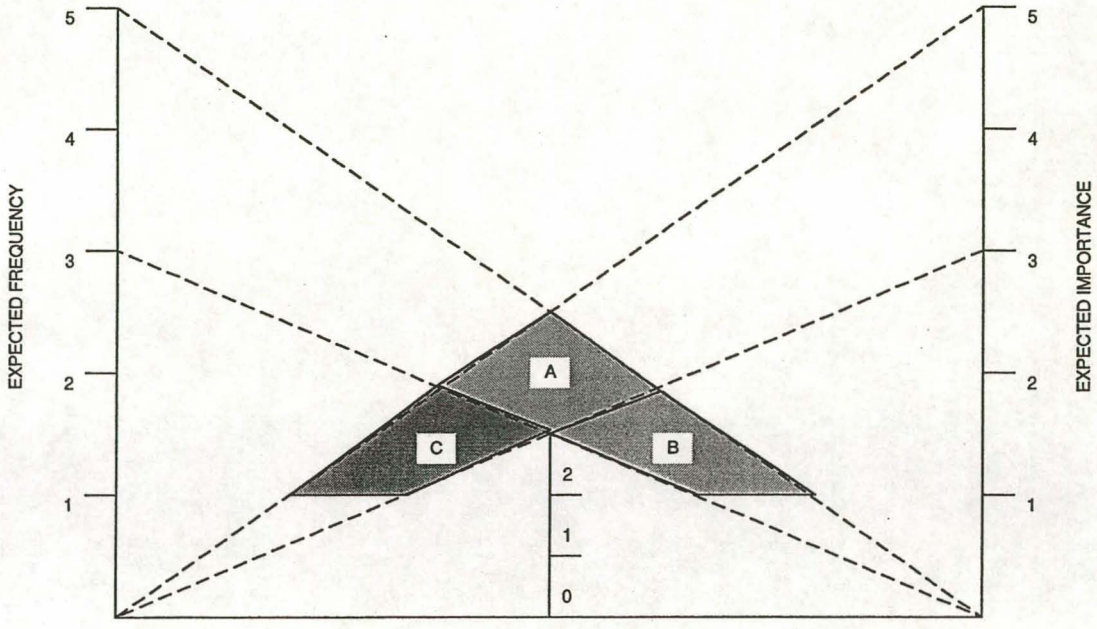
This compensation can be illustrated by an example of elements that has exactly the same meta-value, but different evaluations for the respective predictor variables. The one element has respective scores of 4 and 2 for importance and frequency while another element has respective scores of 2.5 and 2.82. The meta-value is the same in both cases.

The first element, in the example above, has an evaluation score of 4 for importance, but is not performed that often while the second element is neither very important, nor performed often. However, considering the differences in scores, the two elements have the same meta-value. It may appear from this that the model has a built in bias towards elements with a high variance in evaluated scores.

The existence of such a bias may raise an argument against the ISA Model since it eliminates elements with high variations in scores. The fact that an element has a combination of either a high relative frequency with low importance or a high importance with low relative frequency should not influence the overall critical factor.

The critical factor needs further interpretation than the single meta-value. A fourth dimension to the model is the **differential value** of each element. This value is determined by the location of the cross section of the predictor variable plots in relation to the quadrants and indicates the variance between the scores of each task, in distance from the Y3 axis. This dimension together with the meta-value allows for the model to be divided in three sections, (refer to Figure 6.4), that give a reliable indication of the criticalness of each element.

Figure 6.4 THREE SECTIONS IN WHICH THE ISA MODEL IS DIVIDED.



Section, A, indicates all possible combinations of scores with the importance score between 5 and 3 and the frequency score between 5 and 3. The highest and lowest possible meta-value that an element can achieve in this sector is respectively 5 and 3. These are considered to be the elements with the highest level of criticalness.

Section B indicates all possible combinations of scores with the importance score between 5 and 3 and the frequency score ranging 0 to 3 (not including 3). Such tasks are however not performed very often, but which still have a degree of criticalness as a result of the high relative importance of the task. It is possible that elements in this sector can achieve a maximum meta-value of 3.8, which is high if considered in isolation, and a minimum of 0. The opposite can however also occur; an element may achieved a score of 4 for importance together with a score of 2 for frequency. This calculates to a meta-value of 2.7, which is low when considered in isolation.

Section C indicates all possible combinations with the frequency score between 5 and 3 while the importance score is ranging from 0 to 3 (not including 3). Such tasks are however, not evaluated to be very important, but the frequency in the performance of such tasks provides a degree of criticalness to the task. It is possible, as with the section B, that elements in this sector can achieve a maximum meta-value of 3.8, which is high if considered in isolation, and a minimum of 0. The opposite can however also occur, an element may achieved a score of 4 for frequency together with a score of 2 for importance. This calculates to a meta-value of 2.7, which is low considered in isolation.

The following are apparent of the ISA Model:

- It calibrates itself.
- It makes provision for perfect pairs as well as dissimilar evaluations by providing a critical value for any combination.
- It is possible to get the same critical value with different combinations of evaluation.
- The critical value must be interpreted together with the qualities thereof as indicated on the X-axis.
- An element can either be described according to the evaluations of the related predictor variables or the critical value in combination with its qualities.
- The existence of meta- and differential values provide a mechanism to determine the nature of training technique to apply in developing the necessary competencies.

6.3.2 Calculated Critical Factors for each Task Statement

Table 6.5 indicate the critical factors as calculated using the ISA Model for each task statement.

Table 6.5 CRITICAL FACTORS OF THE EVALUATED TASKS.

FUNCTION OF MANAGERIAL LEADER	JOB CLUSTERING		TASK STATEMENT	CRITICAL FACTOR
Manager as leader	Create, affirm and develop direction in the work environment	1	Create an awareness of the organisational vision among subordinates and ordinates through discussion and presentation in order to align work effort.	3.08
		2	Assist in facilitation of work sessions during which departmental vision and mission statements are developed in a collaborative way.	2.80
	Act as mentor for subordinates	3	Maintain a conceptual awareness of the inter-relation between the goals of his/her department in relation to subordinate, ordinate, and super-ordinate goals of other departments in the organisation.	3.18
		4	Contribute to the improvement of group dynamics within the immediate work environment in order to maintain and develop efficient group functioning.	3.73
		5	Observe and evaluate the performance of subordinates for the purpose of constuctive informal feedback or recognition.	4.10
		6	Provide verbal and/or nonverbal feedback on individual performance of subordinates.	3.80
		7	Assist subordinates to reflect on their own performance in order to develop more effective ways to perform related tasks in the future.	3.40

Table 6.5 (Continued) CRITICAL FACTORS OF THE EVALUATED TASKS.

Co-ordinator and Monitor	Monitor, maintain, and develop customer focus to improve service delivery	8	Determine requirements in resources in the department in order to maintain a level of resources to ensure the effective functioning of the department.	3.35
		9	Investigate and determine customer's requirements in the service / products provided by the department.	3.39
		10	Evaluate the use of resources in the department in order to maintain a sufficient level of resources to ensure the effective functioning of the department.	3.60
		11	Receive and evaluate feedback from clients in order to make written and/or verbal recommendations to super-ordinates regarding work processes.	3.88
		12	Evaluate, maintain and suggest improvements to the system operations of the department in order to meet requirements set by customers as well as functional specifications to products or services.	3.64
		13	Create an environment of collaboration in order to enhance conditions for productive work amongst subordinates.	3.98
Facilitator	Create, affirm, and develop effective working relationships	14	Orientates new employees to group work processes, work standards, work norms and values.	3.10
		15	Provide non-verbal feedback (formal) on good or improved individual performance of subordinates in order to develop more effective ways to perform related tasks in the future.	3.20
		16	Receive requests, complaints, and grievances from subordinates and process them according to the policy laid down by the DOD in order to effectively solve work-related requests and problems.	3.25
		17	Conduct disciplinary interviews.	2.88

Table 6.5 (Continued) **CRITICAL FACTORS OF THE EVALUATED TASKS.**

		18	Initiate disciplinary procedures according to guidelines set by the Department of Defence.	3.02
		19	Establish and maintain trust of ordinates, subordinates and super-ordinates in order to affirm effective working relations.	3.85
		20	Identify and manage interpersonal conflict in order to maintain a productive working environment.	3.44
	Contribute and support subordinate career planning and development	21	Identify the need for in-post training and plan the implementation thereof.	3.40
		22	Conduct individual appraisal interviews of subordinates in order to establish career development opportunities.	3.18
	Contribute in recruitment and selection of personnel	23	Evaluate workloads, priorities, and activities in order to recommend personnel requirements.	3.42
		24	Assist in conducting selection interviews to identify possible work team incumbents.	2.68
Director	Gather, disseminate, and prioritise information	25	Monitor work processes and identify problem areas by using scientific management techniques.	3.05
		26	Gather information regarding problem areas in work processes in order to evaluate alternative actions for the improvement of such processes.	3.31
	Share and evaluate information to solve problems and make decisions	27	Make verbal and visual presentations to sub-, super-, and ordinates in order to share and evaluate information.	3.10
		28	Facilitate staff meetings with ordinates and subordinates in order to solve problems.	3.40
		29	Identify and verbally / non-verbally communicate with stakeholders in work processes in order to share information for effective decision making.	3.65

Table 6.5 (Continued) **CRITICAL FACTORS OF THE EVALUATED TASKS.**

	Plan, allocate and assess work carried out by teams and individuals	30	Formulate, evaluate, and update work objectives for teams and individuals by means of a participative process in order to meet set goals.	3.42
		31	Evaluate information in order to develop alternative actions for the improvement of problem areas in work processes.	3.35
		32	Allocate work to teams and individuals in order to meet objectives.	3.40
		33	Evaluate team and individual performance against objectives.	3.32
		34	Provide informal feedback to teams and individuals on their performance in order to improve work effectivity.	3.48
	Secure and allocate resources for work activities	35	Make verbal and visual presentations to super, and ordinates in order to secure resources for activities.	3.09
		36	Motivate the use of resources necessary to attain objectives.	3.20
Innovator	Identify opportunities for, and facilitate change	37	Evaluate work processes, identify, and recommend opportunities for change in procedures.	3.60
		38	Plan and implement change initiatives in order to meet objectives.	3.70
Producer	Monitor and control the use of resources	39	Identify causes of low or poor quality in order to improve work processes.	3.62
		40	Identify and determine kinds, quantity and causes of waste in order to improve work processes.	3.40
		41	Encourage, receive, and process suggestions from subordinates regarding improvements in work processes.	3.61
		42	Monitor and control cost against budgets.	3.41

6.3.3 Interpretation of Critical Factors

The reason for the determination of critical values for each task is to produce a hierarchy of tasks in order of importance to the performance as a Warrant Officer in the South African Navy.

It was indicated in section 6.1.3, Reliability of the Evaluators, that contextual biases did occur in the evaluation of the tasks. Although the inventory of tasks is considered as content valid, the existence of contextual bias in the evaluations does not enable the researcher to publish a universal inventory of management tasks with a definite order in ranking of its criticalness.

It is however possible, with no motive to provide a definite order in ranking, to provide inventories of tasks that are considered to be of a greater priority to managerial work performance. The tasks were for this reason divided into three inventories according to the differential value of each task. The first was compiled by grouping tasks with a differential value in section A (see table 6.6), the second with differential values in section B (see table 6.7).

Table 6.6 INVENTORY 1: TASKS WITH DIFFERENTIAL VALUES IN SECTION A OF THE ISA MODEL.

	TASK STATEMENT	CRITICAL FACTOR
4	Contribute to the improvement of group dynamics within the immediate work environment in order to maintain and develop efficient group functioning.	3.73
5	Observe and evaluate the performance of subordinates for the purpose of constructive informal feedback or recognition.	4.10
6	Provide verbal and/or non-verbal feedback on individual performance of subordinates.	3.80
7	Assist subordinates to reflect on their own performance in order to develop more effective ways to perform related tasks in the future.	3.40

Table 6.6 (Continued) INVENTORY 1: TASKS WITH DIFFERENTIAL VALUES IN SECTION A OF THE ISA MODEL.

8	Determine requirements in resources in the department in order to maintain a level of resources to ensure the effective functioning of the department.	3.35
10	Evaluate the use of resources in the department in order to maintain a level of resources to ensure the effective functioning of the department.	3.60
11	Receive and evaluate feedback from clients in order to make written and/or verbal recommendations to super-ordinates regarding work processes.	3.88
12	Evaluate, maintain and suggest improvements to the system operations of the department in order to meet requirements set by customers as well as functional specifications to products or services.	3.64
13	Create an environment of collaboration in order to enhance conditions for productive work amongst subordinates.	3.98
20	Identify and manage interpersonal conflict in order to maintain a productive working environment.	3.44
21	Identify the need for in-post training and plan the implementation thereof.	3.40
23	Evaluate workloads, priorities, and activities in order to recommend personnel requirements.	3.42
26	Gather information regarding problem areas in work processes in order to evaluate alternative actions for the improvement of such processes.	3.31
28	Facilitate staff meetings with ordinates and subordinates in order to solve problems.	3.40
29	Identify and verbally / non-verbally communicate with stakeholders in work processes in order to share information for effective decision making.	3.65
38	Plan and implement change initiatives in order to meet objectives.	3.70
30	Formulate, evaluate, and update work objectives for teams and individuals by means of a participative process in order to meet set goals.	3.42
32	Allocate work to teams and individuals in order to meet objectives.	3.40
34	Provide informal feedback to teams and individuals on their performance in order to improve work effectivity.	3.48
37	Evaluate work processes, identify, and recommend opportunities for change in procedures.	3.60
39	Identify causes of low or poor quality in order to improve work processes.	3.62
40	Identify and determine kinds, quantity and causes of waste in order to improve work processes.	3.40
41	Encourage, receive, and process suggestions from subordinates regarding improvements in work processes.	3.61
42	Monitor and control cost against budgets.	3.41

Table 6.7 INVENTORY 2: TASKS WITH DIFFERENTIAL VALUES IN SECTION B OF THE ISA MODEL.

	TASK STATEMENT	CRITICAL FACTOR
1	Create an awareness of the organisational vision among subordinates and ordinates through discussion and presentation in order to align work effort.	3.08
2	Assist in facilitation work sessions during which departmental vision and mission statements are developed in a collaborative way.	2.80
3	Maintain a conceptual awareness of the inter-relation between the goals of his/her department in relation to subordinate, ordinate, and super-ordinate goals of other departments in the organisation.	3.18
9	Investigate and determine customer's requirements in the service / products provided by the department.	3.39
14	Orientates new employees to group work processes, work standards, work norms and values.	3.10
15	Provide non-verbal feedback (formal) on good or improved individual performance of subordinates in order to develop more effective ways to perform related tasks in the future.	3.20
16	Receive requests, complaints, and grievances from subordinates and process them according to the policy laid down by the DOD in order to effectively solve work-related requests and problems.	3.25
17	Conduct disciplinary interviews.	2.88
18	Initiate disciplinary procedures according to guidelines set by the Department of Defence.	3.02
22	Conduct individual appraisal interviews of subordinates in order to establish career development opportunities.	3.18
24	Assist in conducting selection interviews to identify possible work team incumbents.	2.68
25	Monitor work processes and identify problem areas by using scientific management techniques.	3.05
27	Make verbal and visual presentations to sub-, super-, and ordinates in order to share and evaluate information.	3.10
31	Evaluate information in order to develop alternative actions for the improvement of problem areas in work processes.	3.35
33	Evaluate team and individual performance against objectives.	3.32
35	Make verbal and visual presentations to super, and ordinates in order to secure resources for activities.	3.09
36	Motivate the use of resources necessary to attain objectives.	3.20

6.4 CONCLUSION

The researcher considers the data as both reliable and valid and has subsequently made use of a Model for Integrated Standard Analysis to calculate critical values, critical factors, of each task in the MTI.

The critical factor together with the differential value of each task were used to provide a inventory of tasks which are considered to be of greater priority to managerial work performance. This inventory will be used in the following chapter, Chapter 7, to infer KSA linkages from the tasks and to provide a profile of core management competencies.

CHAPTER 7:
CORE MANAGEMENT COMPETENCIES FOR WARRANT OFFICERS IN THE SOUTH AFRICAN NAVY

7.1 INTRODUCTION

The competing values framework as discussed in Chapter 2 were used as a conceptual framework for the identification of managerial function and tasks, in Chapter 4. These functions and tasks were compiled as a draft inventory and were tested for content validity, which the result of led to a final inventory that is presented as table 6.5. Table 6.5, also indicates the critical factor of each task as calculated from the results of the evaluation done by the panel of SME (Refer to Chapter 6). The tasks that are considered more critical to the performance of a Warrant Officer in the South African Navy was identified and will be used to make KSA inferences in this chapter. The process to identify the tasks more critical to the performance of a Warrant Officer was discussed in the previous chapter.

7.2 KSA INFERENCES

Competency was defined, in section 2.2.1, as the integration of knowledge, skills and ability that will lead to behaviour which is required to meet a desired level of performance in performing a task. It would herefore be necessary, in order to publish a profile of expected managerial competencies, to infer underlying knowledge, skill and abilities that will lead to the performance of each critical task as indicated in Inventory 1 as per table 6.6.

It is possible to compile a table with management tasks and associated KSA linkages as competency statements for Warrant Officers in the South African Navy. In fact, such a table would meet the requirements in competency as defined.

However, to use a table as suggested above, as a practical competency reference would however be an unwieldy affair. Reasons why the existing inventory 1 is considered cumbersome are as follows:

- Such an inventory table would consist of 24 statements and competency inferences.
- Various tasks and the associated KSA inferences are closely related, particularly the tasks that originate from the same management functions.
- Duplication exists in inferences that are made of similar tasks.
- Performance criteria associated with the competencies in the existing inventory are unclear. This renders the competency statements less valuable as a description of measurable behaviour that is required from Warrant Officers (SANDF COLET, 1998:15).
- Critten (1994:47) argues that competency statements without clear range statements or indicators, which provide a description of the context in which the required behaviour needs to be illustrated and to which performance criteria is applied, allows for the possibility that the competence might become very job specific. Critten continues by stating that competence should be transferable from job to job; client to client and process to process. This argument of transferability of competence is consistent with the requirements of behaviour complexity of the competing values framework used to identify the management functions and tasks of Warrant Officers. The reader will recognise that there are no clear range indicators provided in the existing inventory.

Considering the above, the researcher suggests a competency profile consisting of core competencies that will:

- eliminate duplication of inferences,
- reduce the number of competency statements,
- indicate clear performance standards and also

- provide a context for the application of the competency.

The **competency profile** as set out in Table 7.1 that underlies the existing inventory, as provided in Table 6.6, consists of the following:

- Six **Core Competency Statements** that underlie the original 24 competency statements.
- **Elements** to the core competencies that will provide a description of what the behaviour is that a person should be able to demonstrate (Critten, 1994:46).
- **Performance Criteria** that are statements against which the behaviour required by an element and subsequently demonstrated can be judged (Critten, 1994:46).
- **Range Indicators,** which are statements that elaborate the statements of competence indicating the context to which the elements and performance standards apply (Critten, 1994:47).
- An inferred **KSA Profile** that is associated with each of the core competencies.

Table 7.1: PROFILE OF CORE MANAGEMENT COMPETENCIES FOR WARRANT OFFICERS IN THE SOUTH AFRICAN NAVY.

CORE COMPETENCY WITH ASSOCIATED ELEMENTS	RANGE STATEMENTS	PERFORMANCE INDICATORS	KSA LINKAGES
1. Communication 1.1 Effective Interpersonal Communication (verbal and non- verbal).	▪ Provide formal and informal feedback to sub-ordinates regarding their performance. ▪ Provide informal feedback to individuals and teams regarding	▪ Provide feedback that will effectively improve work performance. ▪ Provide feedback that will enable individuals and groups to improve their work efficiency.	<u>Knowledge</u> Knowledge of the performance of the team or individual. Knowledge of currently formulated objectives to be attained by the department/team. Knowledge of stakeholders in work processes. Knowledge of individual differences/capabilities amongst subordinates.

	their performance.		Knowledge of motivational needs that drive the behaviour of subordinates. Knowledge of existing delegations in the department/team. Knowledge of required key performance areas in order to meet the desired outcome. Skills Skill in written communication to provide clear and unambiguous formal / informal feedback, including incidentations. Skill in conducting formal / informal interviews. Skill in orientating sub-ordinates. Skill in providing feedback regarding required performance.
1.2 Effective Intra-group Communication	▪ Participatively formulate and evaluate objectives. ▪ Allocate work to team members.	▪ Formulate and evaluate team objectives with participation through co-creation from the team. ▪ Effectively delegate work to team members. ▪ Create an environment that support free expression of ideas and suggestions.	
1.3 Effective Organisational Communication	▪ Communicate with stakeholders in work processes. ▪ Make verbal or non-verbal recommendations.	▪ Effectively share information for decision making. ▪ Evaluate and process information received from stakeholders to make recommendations regarding work processes.	Ability Ability to facilitate discussion with or between subordinates. The ability to logically and coherently communicate information to subordinates. The ability to provide feedback without initiating resistance/resentment from the employee. The ability to provide advice without initiating resistance/resentment from the employee.
1.4 Facilitate open Environment for Communication	▪ Encourage and receive suggestions regarding work processes.	▪ Create an environment that support free expression of ideas and suggestions.	The ability to clearly and unambiguously communicate deficiencies in work performance. The ability to clearly and unambiguously communicate proficiencies in work performance. The ability to clearly and unambiguously communicate required work standards and required for performance to employees.
2. **Decision Making**			Knowledge Knowledge of procedural requirements to formal meetings.
2.1 Information Sharing	▪ Share information with stakeholders in decision making.	▪ Share sufficient information to all stakeholders in order to facilitate effective decision making.	Knowledge of alternatives to current work processes and activities. Knowledge of the work processes followed by the department/team. Knowledge of current work process outputs.

2.2 Information Evaluation	▪ Evaluate alternative actions during the decision making process.	▪ Evaluate alternative actions with the underlying motive to effectively improve work processes.	Knowledge of the associated critical performance areas. Knowledge of resources required by the department/team. Knowledge of delegations of the employees in the department/team.
2.3 Participative Decision Making	▪ Use participative problem solving techniques during staff meetings when problems are encountered or needs to be solved.	▪ Apply appropriate problem solving techniques. ▪ Ensure maximum participation from the team.	Knowledge of clients of the department/team. Knowledge of suppliers to the department/team. Knowledge of policy regarding communication with external stakeholders. Knowledge of prior feedback received from clients and/or suppliers. Knowledge of suggested improvements to the systems operations of the department/team. Skills Skill in inter-personnel conflict management techniques. Skill in applying participative decision-making techniques. Skill in applying participative problem solving techniques. Skill in verbal/non verbal communication in order to share information in a clear and unambiguous manner. Skill in data processing in order to select data relevant to problem areas in work processes. Ability Ability to analyse data. Ability to interpret data. Ability to identify critical incidents in work processes in order to meet the desired outcome. Ability to work with ill-defined problems. Ability to facilitate discussion with and between employees during formal and informal meetings. Ability to apply data gathering techniques to different situations. Ability to create an environment of collaboration amongst employees. Ability to provide feedback without initiating resistance/resentment from stakeholders. Ability to provide advice without

			initiating resistance/resentment from stakeholders. Ability to interpret information
3. Facilitation			
3.1 General Facilitation	▪ Facilitate participative problem solving meetings. ▪ Facilitate meetings in which objectives are formulated, evaluated and updated. ▪ Facilitate and manage interpersonal conflict.	▪ Ensure maximum participation by team members. ▪ Allow and develop creativity within the group functioning. ▪ Work towards an environment of co-creation. ▪ Manage conflict to enhance functional performance of the team.	<u>Knowledge</u> Knowledge of procedural requirements to formal meetings. Knowledge of the performance of each employee in the department/team. Knowledge of individual differences between employees in the department/team. Knowledge of motivational needs of employees in the department/team. Knowledge of critical performance areas to each position in the department/team. Knowledge of the goals of the department/team. Knowledge of the required output from the department/team. Knowledge of policy governing the objectives of the department/team. Knowledge of client requirements to the services/products provided by the department/team. Knowledge of technical specifications to products and services provided by the department/team. Knowledge of the actual process outputs of the department/team. Knowledge of existing delegations in the department/team. Knowledge of possible causes of conflict. Knowledge of functional and dysfunctional consequences of conflict. <u>Skills</u> Skill in verbal/non verbal communication in order to share information in a clear and unambiguous manner. Skill in facilitation discussion. Skill in providing feedback regarding performance to subordinates. Skill in applying participative decision-making techniques. Skill in applying participative
3.2 Development of Effective Work Environment	▪ Continuously develop group dynamics and collaborative work environment.		

			problem solving techniques. Skill in applying inter-personnel and intergroup conflict management techniques. Skill in deriving objectives from goals. Skill in determining key performance areas linked to goals and objectives of the department/team. <u>Ability</u> Ability to analyse data. Ability to interpret data. Ability to facilitate discussion with and between employees during formal and informal meetings. Ability to create an environment of collaboration amongst employees. Ability to identify changes in required output. Ability to align link goal objects to individual needs of subordinates. Ability to identify causes of conflict within the department/group. Ability to identify role-players in conflict within the department/group. Ability to identify functionality's and dysfunctionalities of conflict within the department / group. Ability to functional stimulate conflict within the department/team. Ability to facilitate participative problem solving meetings between parties.
4. Analytical			
4.1 Information Gathering	▪ Determine requirements in resources within the department / team. ▪ Observe the work performance of individuals and teams. ▪ Gather information regarding problem areas in work processes. ▪ Identify stakeholders in work processes followed by the	▪ In order to maintain a sustained and effective functioning. ▪ Provide accurate and valid feedback on work performance to individuals and teams. ▪ Successfully determine underlying problems to perceived problem areas. ▪ Involve all relevant stakeholders ▪ Allow and plan improvement s to work processes and outputs on hand of underlying	<u>Knowledge</u> Knowledge of the required output of the team / department. Knowledge of critical performance areas of the team/department. Knowledge of work processes followed in the team / department / organisation. Knowledge of the current process outcomes of the department/team. Knowledge of clients of the department/team. Knowledge of suppliers to the department/team. Knowledge of policy regarding communication with external

	department/team. ▪ Identify and determine causes of low quality. ▪ Identify and determine kinds and quantities of waste. ▪ Monitor costs occurred in work processes.	causes of low quality and high wastage ▪ Maintain expenses of the team within the limits of the approved budget.	stakeholders. Knowledge of resources required by the department/team. Knowledge of prior feedback received from clients and/or suppliers. Knowledge of suggested improvements to the systems operations of the department/team.
4.2 Evaluation	▪ Evaluate the use of resources. ▪ Evaluate feedback from clients. ▪ Evaluate work performance of sub-ordinates	▪ Determine the efficiency of use of resources. ▪ Acquire necessary resources to sustain work performance. ▪ Evaluate the validity and reliability of feedback received. ▪ Make recommendations regarding feedback received from clients.	<u>Skills</u> Skill in the gathering of data regarding process inputs for departmental / team functioning. Skill in the processing of data in order to have applicable and verifiable information. Skill in using forecasting techniques in order to predict future requirements in process inputs. Skill in research methodology. Skill in verbal/non verbal communication in order to share information in a clear, logical and unambiguous manner.
4.3 Calculation	▪ Determine workloads and priorities. ▪ Determine requirements in resources. ▪ Determine quantities of waste. ▪ Calculate budgets.	▪ Gather sufficient data to allow recommendations regarding personnel requirements. ▪ Generate the necessary data regarding the use of resources to allow for timely acquisition of resources to sustain work performance. ▪ Determine quantities of waste in order to submit reports on the efficiency in use of all resources. ▪ Calculate department / team budgets for approval.	Skill in applying participative decision-making techniques. Skill in facilitating discussion. <u>Ability</u> Ability to analyse and interpret information regarding the use of and the possible use of forecasted resources. Ability to understand technical information with relation to the resources used in the team/department. Ability to prioritise information regarding the use of resources with reference to the required outputs. Ability to facilitate discussion with/between people of various organisational levels during formal/informal meetings. Ability to provide feedback without initiating resistance/resentment from stakeholders. Ability to provide advice without initiating resistance/resentment from stakeholders. Ability to interpret information

5. **Performance Management**			Knowledge Knowledge of the goals, objectives and key performance areas of the department / team.
5.1 Individual Performance	▪ Observe and evaluate the performance of sub-ordinates. ▪ Assist sub-ordinates to reflect on their performance. ▪ Identify causes of poor quality work. ▪ Identify kinds and quantities of waste.	▪ In order to maintain a sustained and effective functioning. ▪ Provide accurate and valid feedback on work performance to individuals and teams. ▪ Successfully determine underlying problems to perceived problem areas. ▪ Provide feedback that will effectively improve work performance. ▪ Provide feedback that will enable individuals and groups to improve their work efficiency. ▪ Formulate and evaluate team objectives with participation through co-creation from the team. ▪ Determine, co-operatively, causes of low quality and high waste and collectively plan improvements to the work processes.	Knowledge of critical incidents in the functioning of the department / team. Knowledge of policy governing the objectives of the department/team. Knowledge of client requirements to the services/products provided by the department/team. Knowledge of technical specifications to products and services provided by the department/team. Knowledge of the delegations of teams / individuals. Knowledge of individual / team's performance. Knowledge of individual differences, ability, diversity and personality. Knowledge of learning, perception and values. Knowledge of the systems approach in performance management. Knowledge of the performance appraisal system that is in use in the organisation. Knowledge of the organisations performance appraisal policy. Knowledge of influencing factors in appraising performance. Knowledge of motivational theories and it's relationship with work performance. Knowledge of the organisational policy regarding in post training. Knowledge of existing delegations in the department/team. Knowledge of motivational needs that drive the behaviour of subordinates.
5.2 Group Performance	▪ Continuously develop group dynamics and collaborative work environment. ▪ Formulate, evaluate and update work objectives of teams. ▪ Provide informal feedback to teams regarding their work performance. ▪ Share information. ▪ Identify causes of poor quality work. ▪ Identify kinds and quantities of waste.	▪ Formulate and evaluate team objectives with participation through co-creation from the team. ▪ Determine, co-operatively, causes of low quality and high waste and collectively plan improvements to the work processes. ▪ Provide feedback that will effectively improve work performance. ▪ Provide feedback that will enable individuals and groups to improve their work efficiency. ▪ Share information with all stakeholders in work processes in order to allow	Skills Skill in observing critical incidents in individual/team behaviour. Skill in using the prescribed performance appraisal system. Skill in conducting informal interviews for the purpose of performance feedback. Skill in applying participative

		maximum participation in problem solving and planning. ▪ Ensure that organisational goals are met.	decision making techniques. Skill in applying participative problem solving techniques. Skill in analysing performance motivation levels. Skill in writing training objectives for in post training. Skill in deriving objectives from goals. Skill in providing feedback regarding performance to subordinates. Skill in orientating employees. Ability Ability to determine factors that influence performance of individuals and teams in order to evaluate performance to provide constructive feedback at a later stage. Ability to determine motivational needs of individuals. Ability to provide goal objects that will satisfy motivational needs of individuals The ability to facilitate discussion with and between subordinates. The ability to determine work objectives in a collaborative manner with employees. Ability to use data from an analysis of performance and motivation to determine training objectives. Ability to interpret data regarding performance and motivation levels and the environment to determine the training problem. Ability to identify external sources for training and development of employees in the department/team.
5.3 Human Resource Development	▪ Identify the need for in-post-training. ▪ Plan the implementation of in-post-training. ▪ Recommend personnel requirements.	▪ Build individual capacity to levels required by the organisation. ▪ Plan and implement in post training to meet the policy requirements of the organisation. ▪ Plan in post training for approval by the organisation. ▪ Recommend personnel requirements to sustain a productive environment.	
6. **Change Agent**	▪ Implement change initiatives.	▪ Minimise resistance to change and changes in the work environment.	Knowledge Knowledge of problem areas in work processes. Knowledge of the required output. Knowledge of alternative improvements that will lead to greater client satisfaction. Skills Skill in formulating work objectives. Skill in providing feedback to

teams / individuals regarding work performance.
Skill in applying participatory problem solving techniques.
Skill in applying participatory decision making techniques.

Ability
Ability to allocate and delegate work to individuals and teams.
Ability to assist employees to incorporate change in work processes.
Ability to assist employees to overcome resistance to change.
Ability to work with ill-defined problems.

To answer the possible question as to how the above competency profile relates to the original conceptual structure, a deductive explanation can be provided with the competency profile as starting point.

The above competency profile indicates the required core competencies that has an underlying relationship with the management task inventory as defined in Chapter 4 and, which was refined to a inventory of more critical tasks, Inventory 1 in Chapter 6. Inventory 1 was compiled through a quantitative process based on data received from the evaluations made by the SMEs and was thereafter used to compile the profile of core competencies. The original task identification to ultimately compile Inventory 1 was however done within the boundaries of the competing values framework, refer to Chapter 2 and 3, which serves as the conceptual structure for this research project. **The first relation between the competency profile and the conceptual structure is the fact that the task inventory used to infer a profile of core competencies were compiled within the boundaries set of the conceptual structure.**

The relation as described is content related, another relation exists that is more process orientated. For the conceptual structure to be pragmatic, the following very important process qualifiers were identified:

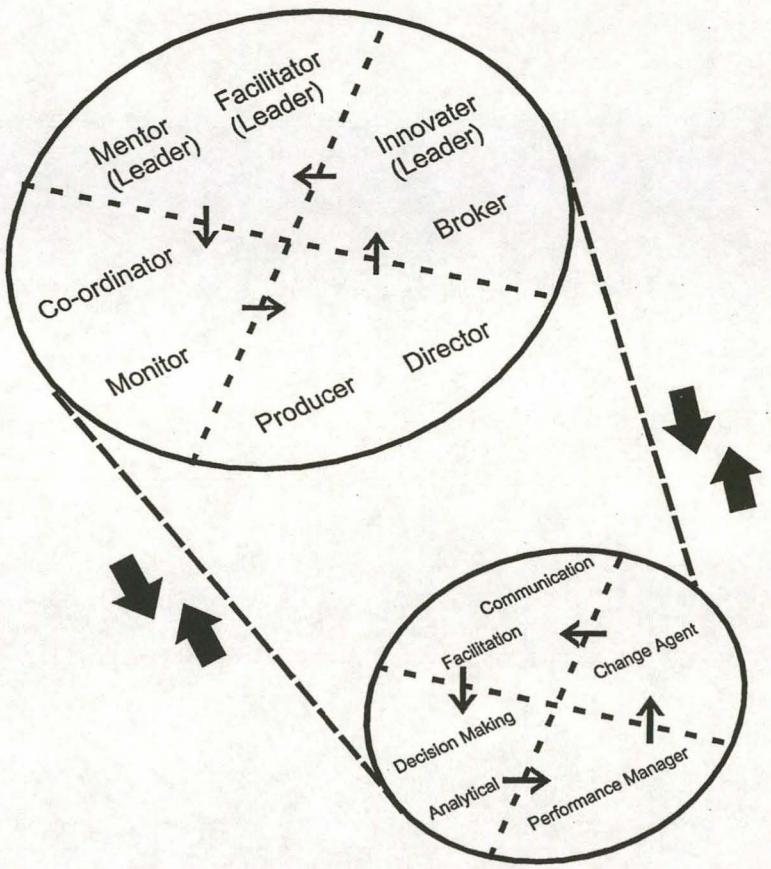
- The values and weaknesses of each model for management have to be appreciated.
- It is necessary that knowledge, skills and attitudes (competencies) associated, with each model, have to be acquired.
- It is necessary that competencies associated with each model have to be dynamically and integratively applied to all managerial situations encountered.

Thus, to operationalise the competing values framework, it is necessary to compile a competency profile with the different competencies in a dynamic relation with the different models of management represented in the framework. Competencies that are learnt must thus be associated with a managerial task in the conceptual structure, but should not be considered as type specific. In other words, one should not restrict the application of a specific competency to predefined problem situations. Thus, **a dynamic and underlying relationship exists between all the core competencies with the conceptual structure as a whole.** This relationship is indicated in Figure 7.1 on the following page.

Furthermore, for the reliable operationalisation of this framework it is required to identify tasks and competencies that are specific to the environment in which the framework are to be implemented. It is herefore important that a content valid task inventory is used since it assures that the tasks that are associated with the conceptual framework are true reflections of the tasks that is required to be performed by Warrant Officers in the Navy. (The process that was used to obtain content validity, by conceptual evaluation and re-evaluation, is described in Chapter 5.) Although the competency profile is based on a content valid task inventory, one should not be naïve to consider the competency profile with the inferred KSA linkages exclusive to the required tasks that are more critical to high work performance. **It would be accurate to argue the competency profile will**

be reliably applicable to the more critical tasks that were identified, but provided KSA linkages will also indirectly allow for the performance of peripheral tasks, related tasks that are not specified in Inventory 1.

Figure 7.1 A GRAPHICAL ILLUSTRATION OF THE DYNAMIC AND UNDERLYING RELATION BETWEEN ALL THE CORE COMPETENCIES AND THE CONCEPTUAL STRUCTURE AS A WHOLE.



7.3 CONCLUSION

The researcher has in this chapter reduced, as per reasons stated, Inventory 1 (Table 6.6), to a profile consisting of 6 core management competencies for Warrant Officers in the South African Navy. This core competency profile (Table

7.1) consists of associated elements, range statements, performance indicators and inferred KSA linkages.

A definite relation exists between the conceptual structure used, competing values framework, and the core competency profile since the task inventory used to infer the profile of core competencies were compiled within the boundaries of the conceptual structure. The competing values framework as conceptual structure also assures a dynamic and underlying nature to this relation because of the integrative characteristic of the framework that was explained in Chapter 2.

CHAPTER 8:
CONCLUSION AND RECOMMENDATIONS

8.1 CONCLUSION

The environment in which managers within the South African Navy functions has undergone many changes in recent years. The most influential of such changes can be summarised as:

- changes in organisation structure and processes stemming from the transformation process that is currently in process,
- constraints in the military budget due to changing priorities in Government spending and
- lastly a overall drive for more operational efficiency by the South African National Defence Force.

The changes as mentioned above, lead the researcher's belief that the current management training curriculum for Warrant Officers in the South African Navy is not valid anymore. This belief was confirmed by a training needs analysis conducted in 1997. This analysis indicated a discrepancy between the required and actual performance of Warrant Officers in the Navy. The report based on the analysis did however not indicate requirements of management behaviour in performing the required tasks.

The aim of this research is to determine the expected management competencies which Warrant Officers in the South African Navy must possess. Such information would provide requirements for management behaviour that will bridge the gap between the required and actual performance already hinted in the training needs analysis completed in 1997.

The researcher has adopted an exploratory and descriptive research design that is divided in three related phases to determine the expected management competencies. The first phase of the design, **forecasting**, was used to compile a task inventory for Warrant Officers in the South African Navy. This inventory was compiled after a study of management literature; the current management training curriculum, and policy documents pertaining training to training and management doctrine in the South African National Defence Force. This study of management literature and policy culminated in a draft management task inventory that was subsequently tested for content validity in the second phase of the research design: **testing.**

The focus of the testing phase in the research design was to obtain content validity in the draft management tasks inventory. The researcher made use of a panel of subject matter experts who evaluated the draft inventory. The subject matter experts had the opportunity to submit tasks that they deemed necessary to include to the draft inventory. The content of the inventory did, through a process of conceptual re-evaluation, achieve face validity.

The subject matter experts were also requested to individually evaluate each task statement according two predictor variables, the relevant importance of the described task to the position of Warrant Officer and also the frequency of performing each task relative to other tasks. These evaluations provided data to determine the more critical management tasks to the performance of Warrant Officers in the South African Navy. The analysis of the evaluations was completed in the third phase in the research design: **Analysis.**

It was possible, through analysis and interpretation of the data obtained from the evaluations made by the subject matter experts, to compile two inventories of management tasks. The first is tasks that are considered to be the elements with the highest level of criticalness (Inventory 1), while the second represents elements with a lower criticalness. The first inventory was subsequently used to infer competency statements.

It was however possible to compile statements for competency for all the elements in Inventory 1, but such a competency profile would have disadvantages, as discussed in section 7.2. The researcher has, with such disadvantages in mind, decided to reduce the number of competency statements to a total of 6 core competencies that underlie a possible profile that would have consisted of 24 statements. The 6 core competencies are:

1. Communication
2. Decision Making
3. Facilitation
4. Analytical
5. Performance Management
6. Change Management

The core competencies as listed above, may be confused with functions of management and should therefore rather be considered as **core functional areas in which a Warrant Officer should be competent**. Each of these core functional areas has associated **elements,** which describe the behaviour that is required to be performed by a competent employee. **Range indicators,** which indicates the context in which competent behaviour needs to be illustrated, as well as **performance criteria** to which the behaviour can be judged. Lastly, each of these core functional areas has a combination of inferred knowledge, skills and ability requirements that underlie the core competency and its elements. (The **core competency profile** is provided in Table 7.1)

8.2 RECOMMENDATIONS

It was stated, as conclusion, that the core competency profile, provides a elements, range indicators, performance criteria and KSA linkages that comprehensively describes the required managerial behaviour of a Warrant Officer in the South African Navy. The researcher would however like to make the

following recommendations that will allow for a greater context in functional use of the core competency profile. The recommendations are as follows:

- A valid and reliable competency profile for only Warrant Officers in the South African Navy has a limited use. The profile may however be used by decision-makers in human resource maintenance and utilisation as well as training and development. **Such a competency profile would however be of much more functional use if related profiles are compiled for the next higher and lower ranks.**
- **An extended information base as recommended above, would allow researchers to identify meta-competencies for Non-commissioned Officers in the South African Navy** as well as competencies that are specific to various posts levels in the South African Navy. Such information will allow for a more scientifically based human resource management systems and specifically more efficient and effective human resource training and development processes.
- Information regarding the gaps in required competency between various post levels will not only allow for more efficient and effective human resource training and development processes, but will also **allow for the re-evaluation of existing career paths in the South African Navy.** This would allow, as indicated in the previous recommendation, scientifically based human resource utilisation systems and ultimately higher career satisfaction of the employees in the South African Navy.
- The researcher would also recommend that **generic competency profiles for post levels should be researched and complimented with research to determine variances in required competency between different musterings within specified post levels.** The researcher has, in calculating the reliability of the evaluators, noted by calculating the statistical significance of the dispersion of the evaluations that contextual biases, which can not be attributed to chance, exists between musterings. The presence of such contextual biases suggest that one can, besides researching a competency

profile generic to all in a post level, research competency profiles for specific musterings at any one post level.

BIBLIOGRAPHY

Bless C & C Higson-Smith, 1995. **Fundamentals of Social Research Methods – An African Perspective.** Kenwyn: Juta & Co.

Bounds GM, Dobbins GH & OS Fowler, 1995. **Management: A Total Quality Management Perspective.** Cincinnati: South-Western College Publishi ng.

Brynard SX & Hanekom PA, 1997. **Introduction to Research in Public Administration.** Pretoria: J.L. van Schaik Publishers.

Clifford JP, 1994. Job Analysis: Why do it, and How Should it be Done? **Public Personnel Management.** Vol. 23(2).

Cowie AP (ed), 1989. **Oxford Advanced Learner's Dictionary of Current English, 4th ed.** Oxford: Oxford University Press.

Cozby PC, 1993. **Methods in Behavioral Research, 5th ed.** London: Mayfield Publishing Company.

Critten P, 1993. **Investing in People. Towards a Corporate Capability.** Oxford: Butterworth-Heinemann.

Defence in Democracy, 1996. **White Paper on National Defence for the Republic of South Africa.** Pretoria: State Printers.

Department of Defence, 1995. **Proposed Integrated Philosophy on Leadership, Command, Management and Organisational Culture, Guidelines for the New Concept in the Department of Defence.** Pretoria: SANDF Headquarters.

De Vries R, 1997a. **First Draft: Management Doctrine for the Department of Defence.** Pretoria: SANDF Headquarters.

De Vries R, 1997b. **Education, Training and Professional Development in Transformation, First Report of the ETD Redesign Project Team, Part 1.** Pretoria: SANDF Headquarters.

Dowel BJ & KN Wexley, 1978. Development of a Work Behavior Taxonomy for First-Line Supervisors. **Journal of Applied Psychology**. Vol. 63(5).

Erasmus BJ & PS van Dyk, 1999. **Training Management in South Africa.** Johannesburg: Thomson Publishing.

Fayol H, 1990. General Principles of Management. Pugh DS (ed). **Organizational Theory, Selected Readings, 3rd ed.** London: Penguin Books.

Gerber PD, Nel PS & PS van Dyk, 1997. **Human Resource Management, 3rd ed.** Johannesburg: Thomson Publishing.

Goldstein I L, 1993. **Training in Organizations.** Pacific Grove: Brooks/Cole Publishing Company.

Griffen RW, 1996. **Management, 5th ed.** Boston: Houghton Mifflin Company.

Ghorpade J & TJ Atchison, 1980. The Concept of Job Analysis: A Review and Some Suggestions. **Public Personnel Journal**, 1980(9).

Hall DT, 1984. Human Resource Management and Organisational Effectiveness. CJ Fombrun, NM Ticky & MA Devenna (eds.), **Strategic Human Resource Management**. New York: Wiley.

Hall J, 1988. **Models for Management, The Structure of Competence, 2 ed.** Woodstead Court: Woodstead Press.

Harvey DF & Brown RB, 1996. **An Experiential Approach to Organizational Development. 5 ed.** London: Prentice Hall.

Herbert GR & Doverspike D, 1990. Performance Appraisal in the Training Needs Analysis Process: A Review and Critique. **Public Personnel Management**, Vol. 19(3).

Howell DL, 1989. **Fundamental Statistics for the Behavioural Sciences. 2 ed.** Boston: PWS-Kent Publishing Company.

Landey FJ & J Vasey, 1991. Job Analysis: The Composition of SME Samples. **Personnel Psychology**, 44.

Latham GP & Wexley KN, 1994. **Increasing Productivity Through Performance Appraisal.** New York: Addison-Wesley Publishing Company.

Meyer T, 1996. **Competencies - Currency for the 21st Century.** Randburg: Knowledge Resources.

Muchinsky PM, Kriek HJ & AMG Schreuder, 1998. **Personnel Psychology.** Johannesburg: Thomson Publishing.

Noe AN, Hollenbeck JR, Gerhart B & PM Wright, 1994. **Human Resource Management: Gaining a Competitive Advantage.** Burr Ridge: Irwin.

Osteraker MC, 1999. Measuring Motivation in a Dynamic Organization - A Contingency Approach. **Strategic Change**, March-April 1999.

Prien EP, Goldstein IL, & W Macey, 1987. Multidomain Job Analysis: Procedures and Applications. **Training and Development Journal**, Aug.

Quin RE, Faerman SR, Thompson MP & MR McGrath. 1996. **Becoming a Master Manager, A Competency Framework. 2 ed.** New York: John Wiley & Sons, Inc.

Rosnow RL & R Rosenthal, 1996. **Beginning Behavioural Research, A Conceptual Primer. 2 ed.** Englewood Cliffs: Prentice Hall.

Sanchez JI & SL Fraser, 1994. An Emperical Approach to Identify Job Duty-KSA Linkages in Managerial Jobs: A Case Example. **Journal of Business and Psychology.** Vol. 8(3).

Schneider B & AM Kontz, 1994. Strategic Job Analysis. in Noe AN, Hollenbeck JR, Gerhart B & PM Wright (eds), **Readings in Human Resource Management.** Burr Ridge: Irwin.

Schuler RS, 1994. Linking the People with the Strategic Needs of the Business. In Noe AN, Hollenbeck JR, Gerhart B & PM Wright (ed.), **Readings in Human Resource Management.** Burr Ridge: Irwin.

Shipmann JS, Prien EP & GL Hughes, 1991. The Content of Management Work: Formation of Task and Job Skill Composite Classifications. **Journal of Business and Psychology.** Vol. 5(3).

Short S, 1997. **Report on MTR 3 Needs Analysis.** SAS SALDANHA

Siegel GB, 1996. Job Analyses in the TQM Environment. **Public Personnel Management**, Vol. 25(3).

Smith RJ, 1994. **Strategic Management and Planning in the Public Sector.** London: Longman.

South African Navy, 1988. **Curriculum for MTR 3 Training.**

SANDF COLET, 1998. **Formulating Outcomes and Objectives.**

South African Naval Orders, 1995. **South African Naval Orders on Total Quality Management.**

Stoner AF, Freeman RE & DR Gilbert jr, 1995. **Management, 6th ed.** Englewood Cliffs: Prentice-Hall.

Thompson D (ed), 1993. **Oxford Dictionary for the Business World.** Oxford: Oxford University Press.

Van Dyk PS, 1997. Introduction to Human Resource Management in Gerber PD Nel,PS & PS van Dyk, 1997. **Human Resource Management, 3rd ed.** Johannesburg: Thomson Publishing.

Wegner T, 1995. **Applied Business Statistics.** Kenwyn: Juta & Co.

Wren DA, 1979. **The Evolution of Management Thought.** New York: John Wiley & Sons.

INTERVIEWS

Dr. D Schutte, July 1998.

Mr. J Bezuidenhout (Lecturer in Statistics at the Military Academy), March 1999.

APPENDIX 1: Managerial Position Analysis Questionnaire used in the Preliminary Study.

MANAGERIAL POSITION ANALYSIS QUESTIONNAIRE

Following is an inventory of predicted tasks to be performed by Warrant Officers in the South African Navy. Please rate the tasks as indicated in the instructions provided below.

INSTRUCTIONS:

Kindly keep the following in mind when rating the tasks:

- The items represent work activities and not individual traits, abilities, or technical knowledge.
- The items are occupational (management) specific and not vocation specific (mustering) and should be generic to the position of Warrant Officer.

Different Ratings:

EXPECTED IMPORTANCE of the task to the position:

Rate the importance of each task according to how important it is that a Warrant Officer in the South African Navy should perform such a task.

0 = Definitely not a part of the position, does not apply, or is not true.
1 = Under unusual circumstances may be a minor part of the position.
2 = A small part of the position.
3 = A somewhat substantial part of the position.
4 = A major part of the position.
5 = Definitely a major part of the position.

Amount of time spent (*EXPECTED FREQUENCY*) performing such task in the position:

Rate the amount of predicted time spent on each task by rating the time spent to each tasks relative to other tasks performed in the position as Warrant Officer in the South African Navy.

0 = Never do this task.
1 = Very little time compared to other tasks.
2 = Somewhat less time compared to other tasks.
3 = Same amount of time as other tasks.
4 = More time compared to other tasks.
5 = A great deal more time compared to other tasks.

To indicate choice:
Circle the relevant rating

EXAMPLE:

	Create an awareness of the organisational vision among subordinates and ordinates through discussion and presentation in order an alignment of energy.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5

1	Create an awareness of the organisational vision among subordinates and ordinates through discussion and presentation in order to align work effort.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
2	Assist in the facilitation of work sessions during which departmental vision and mission statements are developed in a collaborative way.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
3	Maintain a conceptual awareness of the inter-relation between the goals of his/her department in relation to subordinate, ordinate, and super-ordinate goals of other departments in the organisation.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
4	Contribute to the improvement of group dynamics within the immediate work environment in order to maintain and develop efficient group functioning.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
5	Observe and evaluate the performance of subordinates for the purpose of constructive informal feedback or recognition.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
6	Provide verbal and/or non-verbal feedback on individual performance of subordinates.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
7	Assist subordinates to reflect on their own performance in order to develop more effective ways to perform related tasks in the future.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
8	Determine requirements in resources of the department in order to maintain a level of resources to ensure the effective functioning of the department.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
9	Investigate and determine customer's requirements in the service / products provided by the department.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
10	Evaluate the use of resources in the department in order to maintain a level of resources to ensure the effective functioning of the department.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
11	Receive and evaluate feedback from clients in order to make written and/or verbal recommendations to super-ordinates regarding work processes.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5

12	Evaluate, maintain and suggest improvements to the system operations of the department in order to meet requirements set by customers as well as functional specifications to products or services.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
13	Create an environment of collaboration in order to enhance conditions for productive work amongst subordinates.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
14	Orientates new employees to group work processes, work standards, work norms and values.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
15	Provide non-verbal feedback (formal) on good or improved individual performance of subordinates in order to develop more effective ways to perform related tasks in the future.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
16	Receive requests, complaints, and grievances from subordinates and process it according to the policy laid down by the DOD in order to effectively solve work-related requests and problems.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
17	Conduct disciplinary interviews.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
18	Formally assist subordinates to reflect on their own performance in order to develop more effective ways to perform related tasks in the future.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
19	Initiate disciplinary procedures according to guidelines set by the Department of Defence.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
20	Establish and maintain trust of ordinates, subordinates and super-ordinates in order to affirm effective working relations.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
21	Identify and manage interpersonal conflict in order to maintain a productive working environment.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
22	Identify the need for in-post training and plan the implementation thereof.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5

23	Conduct individual appraisal interviews of subordinates in order to establish career development opportunities.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
24	Evaluate workloads, priorities, and activities in order to recommend personnel requirements.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
25	Orientates new employees to group work processes, work standards, work norms and values.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
26	Assist in conducting selection interviews to identify possible work team incumbents.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
27	Monitor work processes and identifies problem areas by using scientific management techniques.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
28	Gather information regarding problem areas in work processes in order to evaluate alternative actions for the improvement of such processes.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
29	Identify and verbally / non-verbally communicate with stakeholders in work processes in order to share information for effective decision making.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
30	Make verbal and visual presentations to sub-, super-, and ordinates in order to share and evaluate information.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
31	Facilitate staff meetings with ordinates and subordinates in order to solve problems.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
32	Investigate and determine customer's requirements in the service / products provided by the department.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
33	Evaluate information in order to develop alternative actions for the improvement of problem areas in work processes.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
34	Formulate, evaluate, and update work objectives for teams and individuals by means of a participative process in order to meet set goals.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5

35	Allocate work to teams and individuals in order to meet objectives.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
36	Provide informal feedback to teams and individuals on their performance in order to improve work effectivity.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
37	Evaluate team and individual performance against objectives.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
38	Make verbal and visual presentations too super-, and ordinates in order to secure resources for activities.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
39	Motivate the use of resources necessary to attain objectives.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
40	Evaluate work processes and recommend opportunities for change in procedures.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
41	Plan and implement change initiatives in order to meet objectives.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
42	Identify causes of low or poor quality in order to improve work processes.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
43	Identify and determine kinds, quantity and causes of waste in order to improve work processes.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
44	Encourage, receive, and process suggestions from subordinates regarding improvements in work processes.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
45	Monitor and control cost against budgets.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
46	Motivate the use of resources necessary to attain objectives.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5

47	Provide informal feedback to teams and individuals on their performance in order to improve work effectivity.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
	Can you provide additional statements? Please rate them as well.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
		Expected Importance: 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
		Expected Importance: 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
		Expected Importance: 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
		Expected Importance: 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
		Expected Importance: 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
		Expected Importance: 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
		Expected Importance: 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
		Importance: 0 1 2 3 4 5 *Frequency:* 0 1 2 3 4 5
		Importance: 0 1 2 3 4 5 *Frequency:* 0 1 2 3 4 5

APPENDIX 2: Managerial Position Analysis Questionnaire used in the Data Collection Phase.

MANAGERIAL POSITION ANALYSIS QUESTIONNAIRE

Following is an inventory of predicted tasks to be performed by Warrant Officers in the South African Navy. Please rate the tasks as indicated in the instructions provided below.

INSTRUCTIONS:

Kindly keep the following in mind when rating the tasks:

- The items represent work activities and not individual traits, abilities, or technical knowledge.
- The items are occupational (management) specific and not vocation specific (mustering) and should be generic to the position of Warrant Officer.

Different Ratings:

EXPECTED IMPORTANCE of the task to the position:

Rate the importance of each task according to how important it is that a Warrant Officer in the South African Navy should perform such a task.

0 = Definitely not a part of the position, does not apply, or is not true.
1 = Under unusual circumstances may be a minor part of the position.
2 = A small part of the position.
3 = A somewhat substantial part of the position.
4 = A major part of the position.
5 = Definitely a major part of the position.

Amount of time spent (*EXPECTED FREQUENCY*) performing such task in the position:

Rate the amount of predicted time spent on each task by rating the time spent to each tasks relative to other tasks performed in the position as Warrant Officer in the South African Navy.

0 = Never do this task.
1 = Very little time compared to other tasks.
2 = Somewhat less time compared to other tasks.
3 = Same amount of time as other tasks.
4 = More time compared to other tasks.
5 = A great deal more time compared to other tasks.

To indicate choice:
Circle the relevant rating

EXAMPLES:

	Create an awareness of the organisational vision among subordinates and ordinates through discussion and presentation in order an alignment of energy.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
	Maintain a conceptual awareness of the inter-relation between the goals of his/her department in relation to subordinate, ordinate, and super-ordinate goals of other departments in the organisation.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5

1	Create an awareness of the organisational vision among subordinates and ordinates through discussion and presentation in order to align work effort.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
2	Assist in the facilitation of work sessions during which departmental vision and mission statements are developed in a collaborative way.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
3	Maintain a conceptual awareness of the inter-relation between the goals of his/her department in relation to subordinate, ordinate, and super-ordinate goals of other departments in the organisation.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
4	Contribute to the improvement of group dynamics within the immediate work environment in order to maintain and develop efficient group functioning.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
5	Observe and evaluate the performance of subordinates for the purpose of constructive informal feedback or recognition.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
6	Provide verbal and/or non-verbal feedback on individual performance of subordinates.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
7	Assist subordinates to reflect on their own performance in order to develop more effective ways to perform related tasks in the future.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
8	Determine requirements in resources of the department in order to maintain a level of resources to ensure the effective functioning of the department.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
9	Investigate and determine customer's requirements in the service / products provided by the department.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
10	Evaluate the use of resources in the department in order to maintain a level of resources to ensure the effective functioning of the department.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
11	Receive and evaluate feedback from clients in order to make written and/or verbal recommendations to super-ordinates regarding work processes.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5

12	Evaluate, maintain and suggest improvements to the system operations of the department in order to meet requirements set by customers as well as functional specifications to products or services.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
13	Create an environment of collaboration in order to enhance conditions for productive work amongst subordinates.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
14	Orientates new employees to group work processes, work standards, work norms and values.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
15	Provide non-verbal feedback (formal) on good or improved individual performance of subordinates in order to develop more effective ways to perform related tasks in the future.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
16	Receive requests, complaints, and grievances from subordinates and process it according to the policy laid down by the DOD in order to effectively solve work-related requests and problems.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
17	Conduct disciplinary interviews.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
18	Formally assist subordinates to reflect on their own performance in order to develop more effective ways to perform related tasks in the future.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
19	Initiate disciplinary procedures according to guidelines set by the Department of Defence.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
20	Establish and maintain trust of ordinates, subordinates and super-ordinates in order to affirm effective working relations.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
21	Identify and manage interpersonal conflict in order to maintain a productive working environment.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
22	Identify the need for in-post training and plan the implementation thereof.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5

23	Conduct individual appraisal interviews of subordinates in order to establish career development opportunities.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
24	Evaluate workloads, priorities, and activities in order to recommend personnel requirements.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
25	Orientates new employees to group work processes, work standards, work norms and values.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
26	Assist in conducting selection interviews to identify possible work team incumbents.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
27	Monitor work processes and identifies problem areas by using scientific management techniques.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
28	Gather information regarding problem areas in work processes in order to evaluate alternative actions for the improvement of such processes.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
29	Identify and verbally / non-verbally communicate with stakeholders in work processes in order to share information for effective decision making.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
30	Make verbal and visual presentations to sub-, super-, and ordinates in order to share and evaluate information.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
31	Facilitate staff meetings with ordinates and subordinates in order to solve problems.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
32	Investigate and determine customer's requirements in the service / products provided by the department.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
33	Evaluate information in order to develop alternative actions for the improvement of problem areas in work processes.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
34	Formulate, evaluate, and update work objectives for teams and individuals by means of a participative process in order to meet set goals.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5

35	Allocate work to teams and individuals in order to meet objectives.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
36	Provide informal feedback to teams and individuals on their performance in order to improve work effectivity.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
37	Evaluate team and individual performance against objectives.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
38	Make verbal and visual presentations too super-, and ordinates in order to secure resources for activities.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
39	Motivate the use of resources necessary to attain objectives.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
40	Evaluate work processes and recommend opportunities for change in procedures.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
41	Plan and implement change initiatives in order to meet objectives.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
42	Identify causes of low or poor quality in order to improve work processes.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
43	Identify and determine kinds, quantity and causes of waste in order to improve work processes.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
44	Encourage, receive, and process suggestions from subordinates regarding improvements in work processes.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
45	Monitor and control cost against budgets.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
46	Motivate the use of resources necessary to attain objectives.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5

47	Provide informal feedback to teams and individuals on their performance in order to improve work effectivity.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
	Can you provide additional statements? Please rate them as well.	*Expected Importance:* 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
		Expected Importance: 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
		Expected Importance: 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
		Expected Importance: 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
		Expected Importance: 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
		Expected Importance: 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
		Expected Importance: 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
		Expected Importance: 0 1 2 3 4 5 *Expected Frequency:* 0 1 2 3 4 5
		Importance: 0 1 2 3 4 5 *Frequency:* 0 1 2 3 4 5
		Importance: 0 1 2 3 4 5 *Frequency:* 0 1 2 3 4 5